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Quantum computation with quantum dots

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#	Paper	IF	Citations
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2290	Quantum mechanics of lattice gas automata: boundary conditions and other inhomogeneities. 1998 , 31, 2321-2340		15
2289	Quantum measurements performed with a single-electron transistor. 1998 , 57, 15400-15407		124
2288	Quantum Information in Semiconductors: Noiseless Encoding in a Quantum-Dot Array. 1998 , 81, 4752-4755		155
2287	Resonant quantum coherence of the Néel vector in a magnetic field applied along the medium axis. 1998 , 58, 8542-8548		9
2286	Thoughts on quantum computation. 1999 , 482-491		
2285	A quantum bit based on a Josephson contact between conventional and high-temperature superconductors (theory). 1999 , 42, 823-825		3
2284	Electronic configurations in coupled many-electron quantum-dot systems. 1999 , 14, 949-957		4
2283	Coulomb-coupling in vertically aligned self-assembled InAs quantum dots. 1999 , 10, 14-18		20
2282	Exchange Interaction of Optically Created Electrons in Coupled Quantum Dots. 1999 , 38, L917-L919		13
2281	Quantum Dots - Pages 133-145. 1999 , 133-145		
2280	Fidelity and Leakage of Josephson Qubits. 1999 , 83, 5385-5388		64
2279	Disentanglement-free state of two pairs of two-level atoms. <i>Physical Review A</i> , 1999 , 59, 4217-4222	2.6	19
2278	Linear optics simulations of the quantum baker's map. <i>Physical Review A</i> , 1999 , 61,	2.6	8
2277	Subdecoherent information encoding in a quantum-dot array. 1999 , 59, 8170-8181		42

2276 Controlling atom-atom interactions in optical lattices.

2275 Quantum computing and single-qubit measurements using the spin-filter effect (invited). **1999**, 85, 4785-4787 64

2274 Physical optimization of quantum error correction circuits. **1999**, 60, 11404-11416 75

2273 Low-Temperature Saturation of the Dephasing Time and Effects of Microwave Radiation on Open Quantum Dots. **1999**, 83, 5090-5093 87

2272 Quantum open-systems approach to current noise in resonant tunneling junctions. **1999**, 59, 10748-10756 52

2271 Zero-field spin splitting in InAs-ALsB quantum wells revisited. **1999**, 60, R13989-R13992 64

2270 Optically driven quantum-dot quantum computer. *Physical Review A*, **1999**, 60, 4146-4149 2.6 21

2269 Spin coherence in semiconductor quantum dots. **1999**, 59, R10421-R10424 197

2268 Study of intersubband transition in quantum dots and quantum dot infrared photodetectors. **1999**, 5, 27-35 84

2267 Qubit devices and the issue of quantum decoherence. **1999**, 22, 257-370 44

2266 Optical analogue structures to mesoscopic devices. **1999**, 23, 131-188 55

2265 Josephson-junction qubits with controlled couplings. **1999**, 398, 305-307 548

2264 Environmentally decoupled sds -wave Josephson junctions for quantum computing. **1999**, 398, 679-681 369

2263 Coherent control of macroscopic quantum states in a single-Cooper-pair box. **1999**, 398, 786-788 1843

2262 Electrical spin injection in a ferromagnetic semiconductor heterostructure. **1999**, 402, 790-792 2126

2261 Coupled quantum dots as quantum gates. **1999**, 59, 2070-2078 1192

2260 Concepts of spin quantum computing. **1999**, 17, 141-172 16

2259 Quantum computers and quantum coherence. **1999**, 200, 202-218 108

2258	Entangled Bell and Greenberger-Horne-Zeilinger States of Excitons in Coupled Quantum Dots. 1999 , 83, 2270-2273		161
2257	Resonant electron transfer between quantum dots. 1999 , 60, 8798-8803		72
2256	Quantum computing with electrons floating on liquid helium. 1999 , 284, 1967-9		266
2255	Quantencomputer: Wie sich Verschrankung fur die Informationsverarbeitung nutzen last. 1999 , 55, 37-43		8
2254	Jordan block structure of two-dimensional quantum neural cellular network. 1999 , 86, 634-639		2
2253	Single-electron devices and their applications. 1999 , 87, 606-632		1022
2252	Quantum computation with quantum dots and terahertz cavity quantum electrodynamics. <i>Physical Review A</i> , 1999 , 60, 3508-3514	2.6	126
2251	Quantum Logic Gates in Optical Lattices. 1999 , 82, 1060-1063		504
2250	Josephson persistent-current qubit. 1999 , 285, 1036-9		1025
2249	Quantum Information Processing Using Quantum Dot Spins and Cavity QED. 1999 , 83, 4204-4207		1590
2248	Nano-Qubits fur Quantencomputer. 2000 , 31, 34-40		2
2247	A Possible Strategy to Defeat Decoherence in Quantum Computation: The Role of Symmetries, Dynamical Algebras, and All That. 2000 , 48, 559-572		2
2246	Solid-state quantum computation – new direction for nanotechnology. 2000 , 27, 89-104		41
2245	Spintronics: electron spin coherence, entanglement, and transport. 2000 , 27, 289-295		42
2244	Quantenalgorithmen konnen Unmogliches. 2000 , 31, 252-259		1
2243	Nanofabrication using liquid helium films. 2000 , 8, 369-375		
2242	Inelastic tunneling in a double quantum dot coupled to a bosonic environment. 2000 , 7, 413-419		17
2241	Linear microwave response of a superconducting charge qubit. 2000 , 275, 159-163		17

2240	An algorithmic benchmark for quantum information processing. 2000 , 404, 368-70	192
2239	A scalable quantum computer with ions in an array of microtraps. 2000 , 404, 579-81	378
2238	Kondo effect in an integer-spin quantum dot. 2000 , 405, 764-7	423
2237	Amplifying quantum signals with the single-electron transistor. 2000 , 406, 1039-46	329
2236	Universal quantum computation with the exchange interaction. 2000 , 408, 339-42	684
2235	Electric-field control of ferromagnetism. 2000 , 408, 944-6	1697
2234	Issues of practical realization of a quantum dot register for quantum computing. 2000 , 29, 549-553	12
2233	Optical spectroscopy on single quantum dots. 2000 , 561-576	1
2232	Quantum Computer Using Coupled-Quantum-Dot Molecules. 2000 , 39, 4642-4646	13
2231	Possible definition of quantum bits in coupled quantum dots.	
2230	Quantum computation with ballistic qubits.	
2229	Nano-electronic circuits as quantum bits.	2
2228	Quantum transport in magneto-optical double-potential wells. 2000 , 2, 633-644	19
2227	Scalable solid-state quantum computer based on quantum dot pillar structures. 2000 , 61, 7526-7535	30
2226	Optically driven qubits in artificial molecules. <i>Physical Review A</i> , 2000 , 62,	2.6 23
2225	Influence of temperature on magnetism in a quantum confined system. 2000 , 87, 2520-2525	
2224	Tunneling through a coherent "Quantum antidot molecule". 2000 , 84, 1776-9	25
2223	Probing entanglement and nonlocality of electrons in a double-dot via transport and noise. 2000 , 84, 1035-8	230

2222	Quantum chaos border for quantum computing. 2000 , 62, 3504-7		128
2221	Charge noise analysis of an AlGaAs/GaAs quantum dot using transmission-type radio-frequency single-electron transistor technique. 2000 , 77, 543-545		68
2220	Application of split-gate structures as tunable spin filters. 2000 , 77, 1050		69
2219	Time-convolutionless reduced-density-operator theory of a noisy quantum channel: Two-bit quantum gate for quantum-information processing. <i>Physical Review A</i> , 2000 , 61,	2.6	30
2218	Single-spin measurement using single-electron transistors to probe two-electron systems. 2000 , 61, 2961-2972		91
2217	Optical holonomic quantum computer. <i>Physical Review A</i> , 2000 , 62,	2.6	69
2216	Noise of entangled electrons: Bunching and antibunching. 2000 , 61, R16303-R16306		204
2215	Single qubit from two coupled quantum dots: An approach to semiconductor quantum computations. <i>Physical Review A</i> , 2000 , 63,	2.6	36
2214	Quantum entanglement and information processing via excitons in optically driven quantum dots. <i>Physical Review A</i> , 2000 , 62,	2.6	97
2213	All-optical electron spin quantum computer with ancilla bits for operations in each coupled-dot cell. <i>Physical Review A</i> , 2000 , 62,	2.6	13
2212	Spin-dependent Josephson current through double quantum dots and measurement of entangled electron states. 2000 , 62, 13569-13572		114
2211	Emergence of quantum chaos in the quantum computer core and how to manage it. 2000 , 62, 6366-75		107
2210	Entangling dipole-dipole interactions for quantum logic with neutral atoms. <i>Physical Review A</i> , 2000 , 61,	2.6	79
2209	Quantum entanglement using trapped atomic spins. <i>Physical Review A</i> , 2000 , 62,	2.6	43
2208	Coupling nanocrystals to a high-Q silica microsphere: Entanglement in quantum dots via photon exchange. <i>Physical Review A</i> , 2000 , 61,	2.6	33
2207	Fault-tolerant quantum computation with local gates. 2000 , 47, 333-345		56
2206	Self-assembled nanoelectronic quantum computer based on the Rashba effect in quantum dots. 2000 , 61, 13813-13820		88
2205	Quantum dot as spin filter and spin memory. 2000 , 85, 1962-5		257

2204	Optically induced entanglement of excitons in a single quantum Dot. 2000 , 289, 1906-9		218
2203	Addition spectrum of a lateral dot from Coulomb and spin-blockade spectroscopy. 2000 , 61, R16315-R16318		338
2202	Spin relaxation in semiconductor quantum dots. 2000 , 61, 12639-12642		469
2201	Quantum computation using electrons trapped by surface acoustic waves. 2000 , 62, 8410-8419		169
2200	Experimental realization of an order-finding algorithm with an NMR quantum computer. 2000 , 85, 5452-5		117
2199	Spin interactions and switching in vertically tunnel-coupled quantum dots. 2000 , 62, 2581-2592		123
2198	Implementation of the refined Deutsch-Jozsa algorithm on a three-bit NMR quantum computer. <i>Physical Review A</i> , 2000 , 62,	2.6	30
2197	Quantum gates by coupled asymmetric quantum dots and controlled-NOT-gate operation. <i>Physical Review A</i> , 2000 , 61,	2.6	113
2196	Semiconductor quantum dots - towards a new generation of semiconductor devices. 2000 , 21, 487-497		32
2195	Spintronics: a new paradigm for electronics for the new millennium. 2000 , 36, 2748-2751		57
2194	Theoretical perspectives on spintronics and spin-polarized transport.		
2193	Prospects for quantum computing.		2
2192	Quantum information processing with semiconductor macroatoms. 2000 , 85, 5647-50		412
2191	Theoretical perspectives on spintronics and spin-polarized transport. 2000 , 36, 2821-2826		59
2190	Issues, concepts, and challenges in spintronics.		2
2189	Electron-spin-resonance transistors for quantum computing in silicon-germanium heterostructures. <i>Physical Review A</i> , 2000 , 62,	2.6	660
2188	Universal fault-tolerant quantum computation on decoherence-free subspaces. 2000 , 85, 1758-61		251
2187	Hilbert-space structure of a solid-state quantum computer: Two-electron states of a double-quantum-dot artificial molecule. <i>Physical Review A</i> , 2000 , 61,	2.6	314

2186	A close look on single quantum dots. 2000 , 112, 7790-7798	139
2185	Spintronics and Quantum Computing with Quantum Dots. 2001 , 293-306	1
2184	InAs/GaAs single-electron quantum dot qubit. 2001 , 90, 6151-6155	131
2183	QUANTUM COMPUTATION WITH BALLISTIC ELECTRONS. 2001 , 15, 125-133	33
2182	Design aspects of superconducting-phase quantum bits. 2001 , 63,	147
2181	Optical spectroscopy on individual CdSe/ZnMnSe quantum dots. 2001 , 79, 524-526	55
2180	Photon beats from a single semiconductor quantum dot. 2001 , 86, 3172-5	160
2179	Thermal entanglement in three-qubit Heisenberg models. 2001 , 34, 11307-11320	130
2178	Nucleus-mediated spin-flip transitions in GaAs quantum dots. 2001 , 64,	144
2177	Detection of single spin decoherence in a quantum dot via charge currents. 2001 , 86, 4648-51	132
2176	Continuous quantum measurement of two coupled quantum dots using a point contact: A quantum trajectory approach. 2001 , 63,	126
2175	Long lived coherence in self-assembled quantum dots. 2001 , 87, 227401	192
2174	Selective quantum evolution of a qubit state due to continuous measurement. 2001 , 63,	183
2173	A quantum conversation. 2001 , 293, 2035-7	
2172	Time-resolved measurement of dissipation-induced decoherence in a Josephson junction. 2001 , 293, 1457-9	89
2171	Entanglement in the quantum Heisenberg XY model. <i>Physical Review A</i> , 2001 , 64,	2.6 497
2170	Quantum-state engineering with Josephson-junction devices. 2001 , 73, 357-400	1962
2169	Magnetic qubits as hardware for quantum computers. 2001 , 12, 181-186	252

2168	Quantum computing with quantum-dot cellular automata. <i>Physical Review A</i> , 2001 , 63,	2.6	79
2167	Double-occupancy errors, adiabaticity, and entanglement of spin qubits in quantum dots. 2001 , 63,		195
2166	Quantum correlations in two-fermion systems. <i>Physical Review A</i> , 2001 , 64,	2.6	293
2165	Optical spectroscopy of single quantum dots at tunable positive, neutral, and negative charge states. 2001 , 64,		104
2164	Radio-frequency single-electron transistor as readout device for qubits: charge sensitivity and backaction. 2001 , 86, 3376-9		163
2163	Spin-flip transitions between Zeeman sublevels in semiconductor quantum dots. 2001 , 64,		398
2162	Reducing constraints on quantum computer design by encoded selective recoupling. 2002 , 88, 017905		84
2161	Spin coherence and dephasing in GaN. 2001 , 63,		171
2160	Anisotropic spin exchange in pulsed quantum gates. 2001 , 87, 207901		72
2159	Solid-state implementation of quantum teleportation and quantum dense coding. <i>Physical Review A</i> , 2001 , 64,	2.6	1
2158	The Kondo effect in an artificial quantum dot molecule. 2001 , 293, 2221-3		249
2157	Interplay between Zeeman coupling and swap action in spin-based quantum computer models: error correction in inhomogeneous magnetic fields. 2001 , 86, 918-21		67
2156	Andreev tunneling, Coulomb blockade, and resonant transport of nonlocal spin-entangled electrons. 2001 , 63,		376
2155	Exchange in silicon-based quantum computer architecture. 2002 , 88, 027903		208
2154	Spin-based quantum computation in multielectron quantum dots. <i>Physical Review A</i> , 2001 , 64,	2.6	66
2153	Zeeman spin splittings in semiconductor nanostructures. 2001 , 63,		73
2152	Quantum network optimization. <i>Physical Review A</i> , 2001 , 64,	2.6	11
2151	Dry etch chemistries for TiO ₂ thin films. 2001 , 185, 27-33		49

2150	Decoherence and dephasing in coupled Josephson-junction qubits. 2001 , 268, 273-283	57
2149	A ferromagnetic III V semiconductor: (Ga,Mn)As. 2001 , 117, 179-186	164
2148	Monitoring single scattering events in single quantum dots. 2001 , 118, 151-155	5
2147	Electron spins in quantum dots for spintronics and quantum computation. 2001 , 119, 229-236	38
2146	Spin electronics and spin computation. 2001 , 119, 207-215	133
2145	Applications of II VI diluted magnetic semiconductors for magneto-electronics. 2001 , 119, 237-244	31
2144	Spin-dependent phenomena in ferromagnetic/nonmagnetic III V heterostructures. 2001 , 119, 281-289	33
2143	Quantum computing with superconducting phase qubits. 2001 , 352, 105-109	1
2142	Double quantum dot between two superconducting leads. 2001 , 352, 162-164	3
2141	Spin-dependent properties of ferromagnetic/nonmagnetic GaAs heterostructures. 2001 , 84, 70-74	12
2140	Thermal conductance through discrete quantum channels. 2001 , 9, 60-68	24
2139	Coherent dynamics and manipulation of electron spins in nanostructures. 2001 , 9, 175-184	5
2138	Spin coherence in semiconductors: storage, transport and reduced dimensionality. 2001 , 9, 194-201	20
2137	A spin-coherent semiconductor photo-detector for quantum communication. 2001 , 10, 569-575	85
2136	Theory of coherent optical control of exciton spin dynamics in a semiconductor dot. 2001 , 10, 7-12	4
2135	Spintronics and quantum computing: switching mechanisms for qubits. 2001 , 10, 452-457	14
2134	Quantum gates using spin states of triple quantum dot. 2001 , 10, 458-462	9
2133	Readout of a single electron spin based quantum bit by current detection. 2001 , 11, 35-40	24

2132	Spintronics and Spin-Based Qubits in Quantum Dots. 2001 , 224, 855-862	1
2131	Optical quantum gates with semiconductor nanostructures. 2001 , 29, 137-150	1
2130	Nanosopic quantum networks: collective versus selective control. 2001 , 29, 93-106	2
2129	Quantum dots as chemical building blocks: elementary theoretical considerations. 2001 , 2, 20-36	111
2128	NMR-Quantencomputer. 2001 , 113, 151-153	4
2127	NMR Quantum Computing. 2001 , 40, 147-149	14
2126	Coherent superposition of photon- and phonon-assisted tunneling in coupled quantum dots. 2001 , 64,	70
2125	Spintronics: a spin-based electronics vision for the future. 2001 , 294, 1488-95	9054
2124	Coupling and entangling of quantum states in quantum dot molecules. 2001 , 291, 451-3	691
2123	Electrical control of spin coherence in semiconductor nanostructures. 2001 , 414, 619-22	274
2122	Experimental realization of Shor's quantum factoring algorithm using nuclear magnetic resonance. 2001 , 414, 883-7	997
2121	Coherent manipulation of semiconductor quantum bits with terahertz radiation. 2001 , 410, 60-3	198
2120	Ultrafast manipulation of electron spin coherence. 2001 , 292, 2458-61	222
2119	Linear microwave response of a charge-type qubit. 2001 , 11, 1022-1025	
2118	Ferromagnetic imprinting of nuclear spins in semiconductors. 2001 , 294, 131-4	101
2117	Semiconductors. Toward functional spintronics. 2001 , 291, 840-1	155
2116	Generation of Maximally Entangled Bell State in a Coupled Quantum Dot. 2001 , 18, 1308-1311	1
2115	A Universal Quantum Network-Quantum Central Processing Unit. 2001 , 18, 166-168	3

2114	A sensitive and fast radio frequency single-electron transistor. 2001 , 12, 96-99	9
2113	Localization and entanglement of two interacting electrons in a double quantum dot. 2001 , 13, 8389-8403	24
2112	A method to protect quantum entanglement against certain kinds of phase and exchange errors. 2001 , 3, S30-S33	
2111	QUANTUM HOLONOMIES FOR QUANTUM COMPUTING. 2001 , 15, 1257-1285	83
2110	Quantum Boolean circuit construction and layout under locality constraint.	6
2109	Dynamics of a mesoscopic charge quantum bit under continuous quantum measurement. 2001 , 64,	101
2108	Semiconductor quantum dot: a quantum light source of multicolor photons with tunable statistics. 2001 , 87, 257401	126
2107	Spin and charge oscillations of a dot due to interaction with itinerant electrons. 2001 , 64,	4
2106	Decoherence in nearly isolated quantum dots. 2001 , 87, 206802	36
2105	Quantum computing of quantum chaos and imperfection effects. 2001 , 86, 2162-5	30
2104	Impurity scattering induced entanglement of ballistic electrons. 2001 , 87, 277901	56
2103	Sample and hold strategy for quantum measurements of Josephson charge qubits. 2001 , 65,	0
2102	Dynamical spin response in semimagnetic quantum dots. 2002 , 88, 027402	116
2101	Conversion of spin into directed electric current in quantum wells. 2001 , 86, 4358-61	233
2100	Effects of conduction band offset on spin-polarized transport through a semimagnetic semiconductor heterostructure. 2001 , 90, 1328-1332	5
2099	One- and two-dimensional N-qubit systems in capacitively coupled quantum dots. <i>Physical Review A</i> , 2001 , 64,	2.6 25
2098	Origin of enhanced dynamic nuclear polarization and all-optical nuclear magnetic resonance in GaAs quantum wells. 2001 , 64,	91
2097	Spin precession and the optical Stark effect in a semiconductor-doped glass. 2001 , 63,	22

2096	Quantum measurement of coherent tunneling between quantum dots. 2001 , 63,		22
2095	Nonlocality of the exchange interaction probed by scanning tunneling spectroscopy. 2001 , 63,		17
2094	Gate-controlled electron spin resonance in GaAs/AlxGa1-xAs heterostructures. 2001 , 64,		78
2093	Superconducting charge qubits: The roles of self and mutual inductances. 2001 , 63,		28
2092	Suppression of arbitrary internal coupling in a quantum register. <i>Physical Review A</i> , 2001 , 64,	2.6	32
2091	Transient current spectroscopy of a quantum dot in the Coulomb blockade regime. 2001 , 63,		90
2090	Effect of an inhomogeneous external magnetic field on a quantum-dot quantum computer. <i>Physical Review A</i> , 2001 , 64,	2.6	25
2089	Theory of angular-momentum relaxation: Quantum-dynamical semigroup approach. <i>Physical Review A</i> , 2001 , 63,	2.6	
2088	Adiabatic steering and determination of dephasing rates in double-dot qubits. 2001 , 64,		36
2087	Quantum-information processing with ferroelectrically coupled quantum dots. <i>Physical Review A</i> , 2001 , 64,	2.6	87
2086	Interaction of tunnel-coupled quantum dots in a magnetic field. 2001 , 63,		9
2085	Implementing universal multiqubit quantum logic gates in three- and four-spin systems at room temperature. <i>Physical Review A</i> , 2001 , 63,	2.6	26
2084	Single-electron measurements with a micromechanical resonator. <i>Physical Review A</i> , 2001 , 64,	2.6	5
2083	Tunneling of zero-dimensional excitons in a single pair of correlated quantum dots. 2001 , 64,		15
2082	Towards the fabrication of phosphorus qubits for a silicon quantum computer. 2001 , 64,		158
2081	Spin spectroscopy of dark excitons in CdSe quantum dots to 60 T. 2001 , 63,		68
2080	Coherent and incoherent pumping of electrons in double quantum dots. 2001 , 63,		83
2079	Creating Bell states and decoherence effects in a quantum-dot system. <i>Physical Review A</i> , 2001 , 63,	2.6	20

2078	Quantum phase gate with a selective interaction. <i>Physical Review A</i> , 2001 , 64,	2.6	27
2077	Test of Bell's Inequality using the Spin Filter Effect in Ferromagnetic Semiconductor Microstructures. 2001 , 70, 1210-1213		76
2076	Carrier-induced ferromagnetism in p $\bar{n}1\bar{n}$ MnxTe. 2001 , 63,		194
2075	Energy barrier to decoherence. <i>Physical Review A</i> , 2001 , 63,	2.6	19
2074	Quantum computing without local control of qubit-qubit interactions. 2002 , 88, 017904		56
2073	Nuclear-spin qubit dephasing time in the integer quantum Hall effect regime. 2001 , 63,		22
2072	Limits to error correction in quantum chaos. 2001 , 86, 5192-5		11
2071	Quantum computing with quantum dots on quantum linear supports. <i>Physical Review A</i> , 2001 , 65,	2.6	28
2070	Decoherence and dissipation during a quantum XOR gate operation. <i>Physical Review A</i> , 2001 , 65,	2.6	91
2069	Decoherence-free subspaces for multiple-qubit errors. II. Universal, fault-tolerant quantum computation. <i>Physical Review A</i> , 2001 , 63,	2.6	46
2068	Indirect interaction of solid-state qubits via two-dimensional electron gas. 2001 , 86, 5112-5		93
2067	Optical manipulation of nuclear spin by a two-dimensional electron gas. 2001 , 86, 2677-80		136
2066	Coherent coupling of two quantum dots embedded in an Aharonov-Bohm interferometer. 2001 , 87, 256802		284
2065	Non-Gaussian noise in quantum spin glasses and interacting two-level systems. 2001 , 87, 127205		7
2064	Preparation of entangled states by adiabatic passage. 2001 , 87, 137902		75
2063	Coherence-preserving quantum bits. 2001 , 87, 247902		54
2062	Cancellation of spin-orbit effects in quantum gates based on the exchange coupling in quantum dots. 2002 , 88, 047903		98
2061	Quantum electronic transport through a precessing spin. 2002 , 89, 286802		40

2060	Highly coherent solid-state quantum bit from a pair of quantum dots. 2002 , 81, 168-170		5
2059	Adiabatic transfer of electrons in coupled quantum dots. 2002 , 66,		91
2058	Encoded universality for generalized anisotropic exchange Hamiltonians. <i>Physical Review A</i> , 2002 , 66,	2.6	13
2057	Single-spin dynamics and decoherence in a quantum dot via charge transport. 2002 , 65,		95
2056	Generation of maximum spin entanglement induced by a cavity field in quantum-dot systems. <i>Physical Review A</i> , 2002 , 65,	2.6	45
2055	Voltage-tunable singlet-triplet transition in lateral quantum dots. 2002 , 66,		91
2054	Semiconductor-cavity QED in high-Q regimes: Detuning effect. <i>Physical Review A</i> , 2002 , 65,	2.6	14
2053	Double-occupation errors induced by orbital dephasing in exchange-interaction quantum gates. 2002 , 66,		17
2052	Photoluminescence of a single InAs quantum dot molecule under applied electric field. 2002 , 65,		52
2051	Measurement of relaxation between polarization eigenstates in single quantum dots. 2002 , 81, 4251-4253		29
2050	Quantum computation with coupled quantum dots embedded in optical microcavities. 2002 , 65,		28
2049	Quantum-Hall quantum bits. 2002 , 66,		18
2048	Dynamical description of quantum computing: Generic nonlocality of quantum noise. <i>Physical Review A</i> , 2002 , 65,	2.6	64
2047	Effects of J-gate potential and uniform electric field on a coupled donor pair in Si for quantum computing. 2002 , 66,		25
2046	Oscillating magnetoresistance in diluted magnetic semiconductor barrier structures. 2002 , 65,		13
2045	Decoherence by a nonlinear environment: Canonical versus microcanonical case. <i>Physical Review A</i> , 2002 , 66,	2.6	2
2044	Scaling considerations in ground-state quantum computation. <i>Physical Review A</i> , 2002 , 65,	2.6	11
2043	Magnetic CdSe-based quantum dots grown on Mn-passivated ZnSe. 2002 , 80, 1237-1239		24

2042	Possible realization of Josephson charge qubits in two coupled Bose-Einstein condensates. <i>Physical Review A</i> , 2002 , 65,	2.6	12
2041	Spin decay and quantum parallelism. 2002 , 66,		98
2040	Digital switching in the quantum domain. 2002 , 1, 154-164		18
2039	Pseudo-digital quantum bits. 2002 , 81, 4619-4621		14
2038	Tunable negative differential resistance controlled by spin blockade in single-electron transistors. 2002 , 80, 2177-2179		40
2037	Non-Markoffian effects of a simple nonlinear bath. 2002 , 66, 041111		21
2036	Temperature dependence of polarization relaxation in semiconductor quantum dots. 2002 , 66,		40
2035	Electron-phonon dynamics in optically excited quantum dots: Exact solution for multiple ultrashort laser pulses. 2002 , 66,		131
2034	Realization of symmetric sharing of entanglement in semiconductor microcrystallites coupled by a cavity field. <i>Physical Review A</i> , 2002 , 66,	2.6	26
2033	Electron spin decoherence in quantum dots due to interaction with nuclei. 2002 , 88, 186802		631
2032	Quantum computing in optical microtraps based on the motional states of neutral atoms. <i>Physical Review A</i> , 2002 , 66,	2.6	48
2031	Ammonia-based quantum computer. <i>Physical Review A</i> , 2002 , 65,	2.6	14
2030	Spin-sensitive bleaching and monopolar spin orientation in quantum wells. 2002 , 88, 057401		49
2029	Quantum control via encoded dynamical decoupling. <i>Physical Review A</i> , 2002 , 66,	2.6	65
2028	Nonperturbative analysis of coupled quantum dots in a phonon bath. 2002 , 66,		19
2027	Decoherence of the quantum gate in Milburn's model of decoherence. <i>Physical Review A</i> , 2002 , 65,	2.6	15
2026	Excitation of right- and left-circularly polarized photoluminescence in silicon-based luminescent materials. 2002 , 91, 2725-2728		
2025	Entanglement generation by adiabatic navigation in the space of symmetric multiparticle states. <i>Physical Review A</i> , 2002 , 66,	2.6	26

2024	Classical microwave response of coupled quantum dots in single-wall carbon nanotubes. 2002 , 80, 4238-4240		3
2023	Self-consistent non-Markovian theory of a quantum-state evolution for quantum-information processing. <i>Physical Review A</i> , 2002 , 66,	2.6	37
2022	Ground-state energy and spin in disordered quantum dots. 2002 , 65,		20
2021	Nuclear spin relaxation in integral and fractional quantum Hall systems. 2002 , 66,		2
2020	Relaxation of photoinjected spins during drift transport in GaAs. 2002 , 81, 2788-2790		49
2019	Exact gate sequences for universal quantum computation using the XY interaction alone. <i>Physical Review A</i> , 2002 , 65,	2.6	33
2018	Monitoring statistical magnetic fluctuations on the nanometer scale. 2002 , 89, 127201		84
2017	Power of anisotropic exchange interactions: Universality and efficient codes for quantum computing. <i>Physical Review A</i> , 2002 , 65,	2.6	25
2016	Quantum phase-gate implementation for trapped ions in thermal motion. <i>Physical Review A</i> , 2002 , 66,	2.6	11
2015	Decoherence of electron spin qubits in Si-based quantum computers. 2002 , 66,		92
2014	Quantum computation with two-level trapped cold ions beyond Lamb-Dicke limit. <i>Physical Review A</i> , 2002 , 65,	2.6	33
2013	Nonadiabatic geometric quantum computation with trapped ions. <i>Physical Review A</i> , 2002 , 66,	2.6	12
2012	Gate errors in solid-state quantum-computer architectures. <i>Physical Review A</i> , 2002 , 66,	2.6	29
2011	Two-qubit quantum computing in a projected subspace. <i>Physical Review A</i> , 2002 , 65,	2.6	11
2010	Hole transport in coupled SiGe quantum dots for quantum computation. 2002 , 92, 346-350		32
2009	Spontaneous localization in InAs/GaAs self-assembled quantum-dot molecules. 2002 , 81, 4449-4451		32
2008	Optical properties of self-assembled Ge wires grown on Si(113). 2002 , 81, 2448-2450		18
2007	Qubits as parafermions. 2002 , 43, 4506-4525		36

2006	Dephasing in modulation-doped quantum structures probed by THz time-domain spectroscopy. 2002 , 81, 4344-4346		19
2005	Flat-band ferromagnetism in quantum dot superlattices. 2002 , 65,		52
2004	Fine structure and spin quantum beats in InP quantum dots in a magnetic field. 2002 , 66,		37
2003	Coulomb-enhanced dynamic localization and Bell-state generation in coupled quantum dots. <i>Physical Review A</i> , 2002 , 66,	2.6	33
2002	Strongly capacitively coupled quantum dots. 2002 , 80, 1818-1820		75
2001	Topological features in ion-trap holonomic computation. <i>Physical Review A</i> , 2002 , 66,	2.6	23
2000	Ultrafast optical signature of quantum superpositions in a nanostructure. 2002 , 66,		14
1999	Two-electron quantum dots as scalable qubits. <i>Physical Review A</i> , 2002 , 66,	2.6	34
1998	Strain effects on silicon donor exchange: Quantum computer architecture considerations. 2002 , 66,		67
1997	Theory of spin-polarized bipolar transport in magnetic pñ junctions. 2002 , 66,		82
1996	Errors due to finite rise and fall times of pulses in superconducting charge qubits. 2002 , 65,		9
1995	Four-terminal quantum resistor network for electron-wave computing. 2002 , 66,		9
1994	Universal quantum logic from Zeeman and anisotropic exchange interactions. <i>Physical Review A</i> , 2002 , 66,	2.6	37
1993	Schrödinger Equation for an Open System. 2002 , 19, 1238-1241		4
1992	Quantum-efficient charge detection using a single-electron transistor. 2002 , 58, 562-568		14
1991	chapter 1 III-V Ferromagnetic Semiconductors. 2002 , 14, 1-87		85
1990	Optical, electrical and magnetic manipulation of spins in semiconductors. 2002 , 17, 275-284		53
1989	ULTRAFAST MANIPULATION OF ELECTRON SPIN COHERENCE IN QUANTUM WELLS. 2002 , 16, 2930-2935		1

1988	Implementation of universal control on a decoherence-free qubit. 2002 , 4, 5-5	84
1987	Technology and materials issues in semiconductor-based magnetoelectronics. 2002 , 17, 342-354	113
1986	Spin dynamics of the neutral and charged InP self-assembled quantum dots.	
1985	Quantum Computation and Proposal for Solid-state Quantum Gates. 2002 ,	1
1984	Controlling dynamical phases in quantum optics. 2002 , 4, S430-S436	4
1983	Quantum Entanglement and Information Transmission Between Non-Direct-Coupled Qubits in an Array of Spatially Fixed Qubits. 2002 , 19, 7-9	4
1982	Preparation of Entangled States of Three Particles by Adiabatic Passage. 2002 , 19, 1041-1043	4
1981	Scanning tunnelling microscope fabrication of arrays of phosphorus atom qubits for a silicon quantum computer. 2002 , 11, 741-748	7
1980	Entanglement of Two-Qubit Quantum Heisenberg XYZ Chain. 2002 , 19, 1044-1047	12
1979	Bell's theorem and chemical potential. 2002 , 35, 8627-8634	1
1978	Pairwise entanglement in the XX model with a magnetic impurity. 2002 , 35, 4293-4300	42
1977	Numerical simulation of coherent transport in quantum wires for quantum computing. 2002 , 49, 1219-1234	18
1976	Electron spins in artificial atoms and molecules for quantum computing. 2002 , 17, 355-366	41
1975	Chapter 15 Relativistic solid state theory. 2002 , 863-918	4
1974	Silicon Epitaxial Regrowth Passivation of SiGe Nanostructures Pattered by AFM Oxidation. 2002 , 737, 156	
1973	Double Quantum Wire Magnetic Response. 2002 , 746, 1	
1972	Determination of the eigenfunctions of arbitrary nanostructures using time domain simulation. 2002 , 91, 3219-3226	32
1971	Scalable solid-state quantum processor using subradiant two-atom states. 2002 , 89, 207902	42

1970	Comprehensive encoding and decoupling solution to problems of decoherence and design in solid-state quantum computing. 2002 , 89, 047901		68
1969	Creating decoherence-free subspaces using strong and fast pulses. 2002 , 88, 207902		123
1968	Decoherence of quantum registers. <i>Physical Review A</i> , 2002 , 65,	2.6	146
1967	Optical RKKY interaction between charged semiconductor quantum dots. 2002 , 89, 167402		143
1966	Time scales of phonon-induced decoherence of semiconductor spin qubits. 2002 , 65,		29
1965	Hyperfine-mediated transitions between a Zeeman split doublet in GaAs quantum dots: The role of the internal field. 2002 , 66,		126
1964	Electro-optical properties of semiconductor quantum dots: Application to quantum information processing. 2002 , 65,		98
1963	Macroscopic entanglement jumps in model spin systems. <i>Physical Review A</i> , 2002 , 66,	2.6	86
1962	Intrinsic exciton-exciton coupling in GaN-based quantum dots: Application to solid-state quantum computing. 2002 , 65,		84
1961	Information and computation: Classical and quantum aspects. 2002 , 74, 347-423		378
1960	Theory of ultrafast phenomena in photoexcited semiconductors. 2002 , 74, 895-950		419
1959	Ferromagnetic III \bar{V} Semiconductors and Their Heterostructures. 2002 , 1-30		15
1958	Spin Dynamics in Semiconductors. 2002 , 107-145		9
1957	Optical Manipulation, Transport and Storage of Spin Coherence in Semiconductors. 2002 , 147-193		22
1956	Electron entanglement via a quantum dot. 2002 , 88, 037901		121
1955	Relaxation of Shallow Donor Electron Spin Due to Interaction with Nuclear Spin Bath. 2002 , 2, 651-655		23
1954	SHORT-TIME DECOHERENCE AND DEVIATION FROM PURE QUANTUM STATES. 2002 , 16, 459-465		18
1953	Electron Spins in Quantum Dots as Qubits for Quantum Information Processing. 2002 , 229-276		7

1952	Spin relaxation in quantum dots. 2002 , 66,	173
1951	Anisotropy and magnetic field effects on the entanglement of a two qubit Heisenberg XY chain. 2002 , 88, 107901	291
1950	Spin injection from (Ga,Mn)As into InAs quantum dots. 2002 , 66,	78
1949	Theory of pure dephasing and the resulting absorption line shape in semiconductor quantum dots. 2002 , 65,	402
1948	Electron transport through double quantum dots. 2002 , 75, 1-22	1354
1947	Measurements of strongly anisotropic g factors for spins in single quantum states. 2002 , 89, 156802	20
1946	Optical Studies of Single Quantum Dots. 2002 , 55, 36-41	96
1945	Superconductor coupled to two Luttinger liquids as an entangler for electron spins. 2002 , 65,	130
1944	Submicrometer ferromagnetic NOT gate and shift register. 2002 , 296, 2003-6	464
1943	Electrical conduction and magnetic moment of a biased double-wire system.	
1942	Dynamics of entanglement for coherent excitonic states in a system of two coupled quantum dots and cavity QED. <i>Physical Review A</i> , 2002 , 65,	2.6 32
1941	Electron spin relaxation by nuclei in semiconductor quantum dots. 2002 , 65,	724
1940	Semiconductor quantum dot-a quantum light source of multicolor photons with tunable statistics.	
1939	A simple model of quantum trajectories. 2002 , 70, 719-737	183
1938	Efficient universal leakage elimination for physical and encoded qubits. 2002 , 89, 127901	67
1937	Theory of fast quantum control of exciton dynamics in semiconductor quantum dots. 2002 , 65,	48
1936	Coulomb interaction effects in spin-polarized transport. 2002 , 65,	58
1935	Triangular Quantum Dots in Magnetic Fields. 2002 , 230, 451-456	6

1934	Quantum Information/Computation Processing with Self-Assembled Macroatoms. 2002 , 233, 377-384	2
1933	Decoherence of Charge States in Double Quantum Dots Due to Cotunneling. 2002 , 233, 385-390	8
1932	Weak Localization and Antilocalization in the Two-Dimensional Electron System on p-Type InAs. 2002 , 233, 436-444	26
1931	Spin Lifetime Measurements in MBE-Grown GaAs Epilayers. 2002 , 233, 445-452	12
1930	Architectures for a Spin Quantum Computer Based on Endohedral Fullerenes. 2002 , 233, 453-461	61
1929	Oxide Semiconductor Materials for Quantum Computation. 2002 , 233, 467-471	7
1928	Theory of Exciton Coherence and Decoherence in Semiconductor Quantum Dots. 2002 , 234, 115-129	7
1927	The Excitonic Quantum Computer. 2002 , 234, 58-69	3
1926	Entanglement of Excitonic States and Quantum Information Processing in Semiconductors. 2002 , 190, 817-825	
1925	Quantum Correlations in Systems of Indistinguishable Particles. 2002 , 299, 88-127	254
1924	Long coherence times in self-assembled semiconductor quantum dots. 2002 , 31, 97-105	8
1923	Ultrafast quantum information processing in nanostructured semiconductors. 2002 , 31, 107-116	
1922	GaN quantum dot based quantum information/computation processing. 2002 , 31, 117-125	9
1921	Quantum computation and the production of entangled photons using coupled quantum dots. 2002 , 31, 127-140	4
1920	Single and coupled quantum dots in single-wall carbon nanotubes. 2002 , 31, 141-149	4
1919	Qubit system in capacitively coupled semiconductor quantum dots. 2002 , 31, 151-157	1
1918	Probing a single quantum dot by pulsed and continuous microwave radiation. 2002 , 314, 444-449	1
1917	Antiferromagnetic coupling between semiconductor quantum dots. 2002 , 314, 25-29	8

1916	Quantum information processing using semiconductor nanostructures. 2002 , 314, 1-9	1
1915	Electron relaxation dynamics and Aharonov-Bohm phase control of transport through a parallel double-dot device. 2002 , 314, 503-506	
1914	Interaction of electromagnetic wave with quantum dots. 2002 , 314, 437-443	5
1913	Application of narrow band-gap materials in nanoscale spin filters. 2002 , 314, 230-234	5
1912	Similarities between single charge and Josephson effects and devices. A fast and sensitive radio frequency single electron transistor. 2002 , 19, 333-337	1
1911	Theory of the Zeeman effect in semiconductor nanocrystals. 2002 , 19, 435-438	21
1910	Hyperfine-mediated spin-flip transitions in GaAs quantum dots. 2002 , 12, 823-826	1
1909	Electron dynamics of a single quantum dot probed with wideband millimeter-wave spectroscopy. 2002 , 13, 109-113	1
1908	Manipulating single quantum dot states in a lateral electric field. 2002 , 13, 147-150	18
1907	Transfer of spin orientation into electric current in quantum wells. 2002 , 13, 552-555	
1906	Photoluminescence spectroscopy on single CdSe quantum dots in a semimagnetic ZnMnSe matrix. 2002 , 13, 512-515	10
1905	Entangled states of electron-hole complex in a single InAs/GaAs coupled quantum dot molecule. 2002 , 13, 610-615	19
1904	Quantum gates using tunneling electron spins of a quantum-dot chain. 2002 , 13, 616-619	5
1903	Intrinsic dipole-dipole excitonic coupling in GaN quantum dots: application to quantum information processing. 2002 , 13, 624-629	6
1902	Multiexciton transients in a single quantum dot. 2002 , 32, 239-247	4
1901	Manipulation and measurement of nuclear spin over the quantum Hall regime for quantum information processing. 2002 , 32, 261-273	4
1900	Entanglement of two interacting electrons in a double quantum dot. 2002 , 294, 108-112	4
1899	Pairwise thermal entanglement in the n-qubit ($n \geq 5$) Heisenberg XX chain. 2002 , 300, 567-572	22

1898	Dynamics of spins in a quantum dot in the presence of a stationary current. 2002 , 300, 628-635	1
1897	Coherent control of the fundamental transition in a single quantum dot. 2002 , 124, 311-315	1
1896	Excimers and their entanglement in double quantum dots. 2002 , 124, 203-206	
1895	Elementary operations for quantum logic with a single trapped two-level cold ion beyond Lamb-Dicke limit. 2002 , 208, 131-138	9
1894	Allowed and forbidden transitions in artificial hydrogen and helium atoms. 2002 , 419, 278-81	326
1893	Gate-voltage control of spin interactions between electrons and nuclei in a semiconductor. 2002 , 415, 281-6	183
1892	Topologically protected quantum bits using Josephson junction arrays. 2002 , 415, 503-6	163
1891	On a physical implementation of logical operators NOT and CNOT in a two-qubit quantum computer controlled by ultrashort optical pulses. 2002 , 94, 882-891	3
1890	Coulomb blockade in a lateral triangular small quantum dot. 2002 , 76, 720-723	3
1889	Impurity entanglement in three-qubit Heisenberg XX chain. 2002 , 297, 291-299	25
1888	A simulator for ensemble quantum computing. 2002 , 144, 277-283	
1887	Quantum computing with spin qubits in semiconductor structures. 2002 , 146, 331-338	25
1886	Self-assembled Ge quantum dots on Si and their applications. 2002 , 237-239, 1892-1897	43
1885	Semiconductor spintronics. 2002 , 1, 19-31	101
1884	Universal quantum computation with spin-1/2 pairs and Heisenberg exchange. 2002 , 89, 147902	294
1883	Electronic structure of quantum dots. 2002 , 74, 1283-1342	1066
1882	Spin dynamics in semiconductor nanocrystals. 2002 , 66,	130
1881	Biexcitons in coupled quantum dots as a source of entangled photons. 2002 , 65,	64

1880	Ultrafast laser spectroscopy of semiconductor nanocrystals. 2002 , 52, 645-667	3
1879	Far-infrared probe of size dispersion and population fluctuations in doped self-assembled quantum dots. 2003 , 35, 209-216	5
1878	Ferromagnetism in diluted magnetic semiconductor quantum dot arrays embedded in semiconductors. 2003 , 36, 593-598	11
1877	Magneto-optical transitions in multilayer semiconductor nanocrystals. 2003 , 15, 3593-3606	5
1876	Size-dependent decoherence of excitonic states in semiconductor microcrystallites. <i>Physical Review A</i> , 2003 , 67,	2.6 6
1875	Quantum communication through an unmodulated spin chain. 2003 , 91, 207901	970
1874	Impact of pure dephasing on the nonlinear optical response of single quantum dots and dot ensembles. 2003 , 67,	79
1873	Crossover from weak localization to antilocalization in quantum dots with spin-orbit coupling. 2003 , 317, 507-512	9
1872	Tuning of the electronic levels in vertically stacked InAs/GaAs quantum dots using crystal growth kinetics. 2003 , 252, 44-50	21
1871	Two-electron and four-electron periodicity in single-wall carbon nanotube quantum dots. 2003 , 34, 377-382	9
1870	Dephasing of a coupled qubit system during gate operations due to background charge fluctuations. 2003 , 34, 497-501	
1869	Synthesis and characterization of semimagnetic semiconductor nanocrystals for spin electronics. 2003 , 23, 753-756	2
1868	Type-II Zn _{1-x} MnxSe/ZnSe _{1-y} Tey quantum wells. 2003 , 429, 243-247	5
1867	Tunneling and electric-field effects on electron-hole localization in artificial molecules. 2003 , 128, 147-151	1
1866	Single electron devices for simulating read-out in a solid state quantum computer. 2003 , 532-535, 1199-1203	1
1865	Addition spectrum of the conductance in 2-dimensional arrays of quantum dots. 2003 , 33, 81-93	3
1864	All-optical circular polarization switching phenomenon observed in photo chemically etched silicon. 2003 , 216, 334-339	
1863	A scheme of quantum computing with semiconductor quantum dots in optical cavity. 2003 , 306, 353-357	3

- 1862 The non-deterministic quantum logic operation and the teleportation of the superposition of the vacuum state and the single-photon state via parametric amplifiers. **2003**, 311, 271-276
- 1861 Decoherence free in subspace using Na@C60 as quantum qubit. **2003**, 313, 21-28 6
- 1860 Low-temperature transport in single and coupled quantum dots in single-wall carbon nanotubes. **2003**, 16, 35-41 4
- 1859 Are quantum dots useful for quantum computation?. **2003**, 16, 47-50 23
- 1858 Electrical control of spin precession in semiconductor quantum wells. **2003**, 16, 99-103 11
- 1857 Time-dependent spin interaction and switching in quantum dot molecule under the adiabatic approximation. **2003**, 17, 367-370 4
- 1856 Cooper-pair-box qubits in a quantum electrodynamic cavity. **2003**, 18, 33-34 32
- 1855 Stabilization of ground-state minimal spin in disordered quantum dots. **2003**, 18, 79-80
- 1854 Quantum information technology. **2003**, 6, 30-36 4
- 1853 Coherent electronic transport through magnetic junction. **2003**, 236, 360-363
- 1852 High-quality In_xGa_{1-x}As/Al_{0.3}Ga_{0.7}As quantum dots grown in inverted pyramids. **2003**, 238, 233-236 26
- 1851 Quantum dots: a source of multicolor photons with tunable statistics and correlated polarizations. **2003**, 238, 297-300
- 1850 Spin selective tunneling and blockade in two-electron double quantum dot. **2003**, 238, 335-340
- 1849 Overview of spin-based quantum dot quantum computation. **2003**, 238, 360-365 17
- 1848 Implementation of an all-optical spin-based quantum computer. **2003**, 238, 411-418 4
- 1847 Analytical results for nonlinear optical signals from quantum dots coupled to phonons. **2003**, 238, 581-588 2
- 1846 Observation of spin Pauli blocking in InAs high-uniform quantum dots. **2003**, 1145-1148 8
- 1845 Structural and magneto-optical studies on multiple quantum dots containing magnetic semiconductors. **2003**, 1283-1287

1844	Precisely ordered quantum dot array formed using AFM lithography for all-optical electron spin quantum computers. 2003 , 1364-1367		15
1843	Spin relaxation in InP quantum dots. 2003 , 1368-1371		
1842	Electronic structure calculations for 2-D quantum dots and laterally coupled quantum dot molecules in magnetic fields. 2003 , 91, 490-497		5
1841	Metal-insulator transition in the Hubbard model on a triangular lattice with disorders: Renormalization group approach. 2003 , 93, 360-374		2
1840	Real-time detection of electron tunnelling in a quantum dot. 2003 , 423, 422-5		311
1839	Properties of shallow-level D centers in polar semiconductors. 2003 , 37, 302-306		3
1838	Nonlinear dynamics of semiclassical spin in a time-dependent magnetic field. 2003 , 97, 85-92		2
1837	Solid-state physics: drawing quantum circuitry. 2003 , 424, 730-1		
1836	Entanglement and correlation for identical particles in quantum computing. 2003 , 311, 443-458		6
1835	Effect of quantum lattice fluctuations on quantum coherent oscillations in a coherently driven quantum dot-cavity system. 2003 , 314, 380-385		17
1834	Quantum entanglement of identical particles. <i>Physical Review A</i> , 2003 , 67,	2.6	89
1833	Spin-based all-optical quantum computation with quantum dots: Understanding and suppressing decoherence. <i>Physical Review A</i> , 2003 , 68,	2.6	200
1832	Dicke effect in the tunnel current through two double quantum dots. 2003 , 68,		42
1831	Natural two-qubit gate for quantum computation using the XY interaction. <i>Physical Review A</i> , 2003 , 67,	2.6	142
1830	Efficient electron spin manipulation in a quantum well by an in-plane electric field. 2003 , 83, 5295-5297		64
1829	Few-electron quantum dot circuit with integrated charge read out. 2003 , 67,		325
1828	Orbital mechanisms of electron-spin manipulation by an electric field. 2003 , 91, 126405		266
1827	Tunable coupling of superconducting qubits. 2003 , 90, 127901		155

1826	Nonequilibrium spintronic transport through an artificial Kondo impurity: conductance, magnetoresistance, and shot noise. 2003 , 90, 116602		144
1825	Magnetopolaron in a weakly elliptical InAs/GaAs quantum dot. 2003 , 67,		37
1824	Spin-orbit coupling and time-reversal symmetry in quantum gates. 2003 , 68,		59
1823	Entanglement of solid-state qubits by measurement. 2003 , 67,		66
1822	Quantum computing with spin cluster qubits. 2003 , 90, 047901		208
1821	Thermal entanglement in the two-qubit Heisenberg XY model under a nonuniform external magnetic field. <i>Physical Review A</i> , 2003 , 68,	2.6	148
1820	Theory of nuclear-induced spectral diffusion: Spin decoherence of phosphorus donors in Si and GaAs quantum dots. 2003 , 68,		204
1819	Spin-lattice relaxation in Si quantum dots. 2003 , 68,		25
1818	Quantum information processing with superconducting qubits in a microwave field. 2003 , 68,		286
1817	Spin-swap gate in the presence of qubit inhomogeneity in a double quantum dot. <i>Physical Review A</i> , 2003 , 68,	2.6	11
1816	Quantum technology: the second quantum revolution. 2003 , 361, 1655-74		332
1815	Practical design and simulation of silicon-based quantum-dot qubits. 2003 , 67,		203
1814	. 2003 , 91, 761-780		51
1813	Modeling and prospects for a solid-state quantum computer. 2003 , 9, 1874-1883		3
1812	. 2003 , 9, 1756-1764		11
1811	Quantum cascade transitions in nanostructures. 2003 , 52, 455-521		44
1810	Effect of an inhomogeneous external magnetic field on the electronic coupling of quantum dot molecule. 2003 , 334, 250-256		1
1809	Quantum computing with antiferromagnetic spin clusters. 2003 , 68,		143

1808	Enhanced thermal entanglement in an anisotropic Heisenberg XYZ chain. <i>Physical Review A</i> , 2003 , 68,	2.6	191
1807	Coherent spin transfer between molecularly bridged quantum dots. 2003 , 301, 1074-8		210
1806	Long-lived memory for mesoscopic quantum bits. 2003 , 90, 206803		198
1805	Multipartite entangled states in coupled quantum dots and cavity QED. <i>Physical Review A</i> , 2003 , 67,	2.6	85
1804	Gigahertz electron spin manipulation using voltage-controlled g-tensor modulation. 2003 , 299, 1201-4		215
1803	Dissipationless quantum spin current at room temperature. 2003 , 301, 1348-51		1562
1802	Electron spin coherence in semiconductors: Considerations for a spin-based solid-state quantum computer architecture. 2003 , 67,		126
1801	Ghost Fano resonance in a double quantum dot molecule attached to leads. 2003 , 67,		266
1800	Gate control of spin dynamics in III-V semiconductor quantum dots. 2003 , 68,		86
1799	From Frustrated Ising Models to Quantum Computing. 2003 , 75-88		
1798	Magnetic properties of parabolic quantum dots in the presence of the spin-orbit interaction. 2003 , 94, 5891-5895		59
1797	Electron spin relaxation times of phosphorus donors in silicon. 2003 , 68,		326
1796	Electron spin dynamics in quantum dots and related nanostructures due to hyperfine interaction with nuclei. 2003 , 15, R1809-R1833		168
1795	Tuning the properties of magnetic CdMnTe quantum dots. 2003 , 83, 3575-3577		35
1794	Spin-based optical quantum computation via Pauli blocking in semiconductor quantum dots. 2003 , 62, 175-181		96
1793	Combined atomic force microscope and electron-beam lithography used for the fabrication of variable-coupling quantum dots. 2003 , 83, 1163-1165		15
1792	Probing the spin state of a single electron trap by random telegraph signal. 2003 , 91, 078301		36
1791	Wave functions and g factor of holes in Ge/Si quantum dots. 2003 , 67,		43

1790	Variable coupling in n-type silicon-germanium double quantum dots. 2003 , 82, 4492-4494		14
1789	Polarization Spectroscopy of Charged Single Self-Assembled Quantum Dots. 2003 , 789, 328		1
1788	Physics. Spinning holes in semiconductors. 2003 , 301, 1335-6		6
1787	Enhancement of thermal entanglement in two-qubit XY models. 2003 , 5, 73-76		24
1786	Polarization Spectroscopy of Charged Single Self-Assembled Quantum Dots. 2003 , 799, 24		
1785	Nonideality of quantum operations with the electron spin of a 31P donor in a Si crystal due to interaction with a nuclear spin system. 2003 , 67,		25
1784	Measuring the decoherence rate in a semiconductor charge qubit. 2003 , 68,		66
1783	Luminescence quantum beats of strain-induced GaAs quantum dots. 2003 , 68,		16
1782	Electronic states in silicon quantum dots: Multivalley artificial atoms. 2003 , 68,		41
1781	Optically oriented and detected electron spin resonance in a lightly doped n-GaAs layer. 2003 , 67,		18
1780	Electron spin evolution induced by interaction with nuclei in a quantum dot. 2003 , 67,		205
1779	Optimal state discrimination using particle statistics. <i>Physical Review A</i> , 2003 , 68,	2.6	18
1778	Quantum computing in the presence of spontaneous emission by a combined dynamical decoupling and quantum-error-correction strategy. <i>Physical Review A</i> , 2003 , 68,	2.6	22
1777	Manganese nanoclusters and nanowires on GaAs surfaces. 2003 , 67,		
1776	Quantum entanglement of excitons in coupled quantum dots. <i>Physical Review A</i> , 2003 , 67,	2.6	13
1775	Effect of noise on quantum teleportation. <i>Physical Review A</i> , 2003 , 68,	2.6	15
1774	Optical readout and initialization of an electron spin in a single quantum dot. 2003 , 68,		101
1773	Magnetoresistance effect in AgFe ₃ O ₄ and AlFe ₃ O ₄ composite films. 2003 , 93, 7702-7704		17

1772	Time-domain simulation of quantum spin. 2003 , 94, 6518-6524	7
1771	Rashba effect in two-dimensional mesoscopic systems with transverse magnetic field. 2003 , 68,	29
1770	Coupling between magnetic/nonmagnetic semiconductor quantum dots in double-layer geometry. 2003 , 83, 2865-2867	5
1769	Directional luminescence from quantum dots in quantum well. 2003 , 93, 2957-2961	
1768	Magnetic field tuning of the effective g factor in a diluted magnetic semiconductor quantum dot. 2003 , 82, 2661-2663	52
1767	Optical detection of hot-electron spin injection into GaAs from a magnetic tunnel transistor source. 2003 , 90, 256603	87
1766	Dephasing due to background charge fluctuations. 2003 , 67,	67
1765	Even-odd effect in spontaneously coherent bilayer quantum Hall droplets. 2003 , 91, 026804	6
1764	Andreev level qubit. 2003 , 90, 087003	95
1763	Quantum computing with an always-on Heisenberg interaction. 2003 , 90, 247901	147
1762	Spin-blockade spectroscopy of a two-level artificial molecule. 2003 , 91, 026803	57
1761	Dynamical Coulomb blockade and spin-entangled electrons. 2003 , 91, 267003	59
1760	Electrical manipulation of nanomagnets. 2003 , 91, 088301	11
1759	Dressed qubits. 2003 , 91, 097904	43
1758	Laser threshold reduction in a spintronic device. 2003 , 82, 4516-4518	137
1757	Laser interaction with a pair of two-dimensional coupled quantum dots. 2003 , 94, 2579-2584	6
1756	Quantum toys for quantum computing: persistent currents controlled by the spin Josephson effect. 2003 , 91, 076806	19
1755	Current-voltage characteristics and magnetic moment of a tunnel-coupled double-wire structure. 2003 , 67,	

1754	Spin polarization of self-assembled CdSe quantum dots in ZnMnSe. 2003 , 83, 4604-4606		17
1753	Fast nonadiabatic two-qubit gates for the Kane quantum computer. <i>Physical Review A</i> , 2003 , 68,	2.6	22
1752	Spin-based quantum-information processing with semiconductor quantum dots and cavity QED. <i>Physical Review A</i> , 2003 , 67,	2.6	46
1751	Quantum-cellular-automata quantum computing with endohedral fullerenes. <i>Physical Review A</i> , 2003 , 67,	2.6	94
1750	Biexciton and spin dephasing effects in quantum dots embedded in a glass matrix proved by four-wave mixing and pump-and-probe spectroscopy. 2003 , 67,		9
1749	Coherent fluorescence resonance energy transfer: Construction of nonlocal multiparticle entangled states and quantum computing. 2003 , 63, 21-27		20
1748	Experimental realization of a fetching algorithm in a 7-qubit NMR spin Liouville space computer. 2003 , 119, 8473-8481		46
1747	Triplet superconductors from the viewpoint of basic elements for quantum computers. 2003 , 13, 944-947		1
1746	Detector-induced dephasing in quantum-dot cellular automata qubit. 2003 , 94, 2142-2144		1
1745	Adiabatic evolution of a coupled-qubit Hamiltonian. 2003 , 68,		8
1744	Pseudospin quantum computation in semiconductor nanostructures. 2003 , 91, 167903		11
1743	Singlet-triplet transition tuned by asymmetric gate voltages in a quantum ring. 2003 , 91, 206802		34
1742	Spin and energy transfer in nanocrystals without tunneling. 2003 , 68,		49
1741	High-finesse optical quantum gates for electron spins in artificial molecules. 2003 , 90, 206802		85
1740	Scalable quantum processor with trapped electrons. 2003 , 91, 017901		52
1739	Frequency hopping in quantum interferometry: efficient up-down conversion for qubits and ebits. 2003 , 90, 027902		34
1738	Qutrit quantum computer with trapped ions. <i>Physical Review A</i> , 2003 , 67,	2.6	112
1737	InAs/GaAs(001) quantum dots close to thermodynamic equilibrium. 2003 , 82, 3194-3196		49

1736	Zeeman energy and spin relaxation in a one-electron quantum dot. 2003 , 91, 196802		302
1735	Generation and evolution of spin entanglement in nonrelativistic QED. <i>Physical Review A</i> , 2003 , 68,	2.6	4
1734	Decoherence-Free Subspaces and Subsystems. 2003 , 83-120		123
1733	Nonuniform alloying in Ge(Si)/Si(001) quantum dots. 2003 , 94, 7067-7070		15
1732	Dephasing in an isolated double-quantum-dot system deduced from single-electron polarization measurements. 2003 , 67,		33
1731	Manipulating the L-valley electron g factor in Si-Ge heterostructures. 2003 , 68,		14
1730	Inelastic tunneling spectroscopy in a d-wave superconductor. 2003 , 68,		20
1729	Spatial imaging of magnetically patterned nuclear spins in GaAs. 2003 , 68,		24
1728	Exciton spin relaxation time in quantum dots measured by continuous-wave photoluminescence spectroscopy. 2003 , 83, 5524-5526		41
1727	Correlated charge detection for readout of a solid-state quantum computer. 2003 , 82, 577-579		29
1726	Grover algorithm for large nuclear spins in semiconductors. 2003 , 68,		30
1725	Realistic simulations of single-spin nondemolition measurement by magnetic resonance force microscopy. <i>Physical Review A</i> , 2003 , 68,	2.6	23
1724	Rabi oscillations, coherent properties, and model qubits in two-level donor systems under terahertz radiation. 2003 , 68,		6
1723	Energy spectra of two-electron two-dimensional quantum dots confined by elliptical and bowl-like potentials. 2003 , 94, 5844-5849		14
1722	Communicating Josephson qubits. 2003 , 67,		96
1721	Lower bound for electron spin entanglement from beam splitter current correlations. 2003 , 91, 087903		44
1720	Andreev quantum dots for spin manipulation. 2003 , 90, 226806		83
1719	Quantum computation with a one-dimensional optical lattice. 2003 , 91, 107902		117

1718	Qubits with electrons on liquid helium. 2003 , 67,	85
1717	Projective measurement scheme for solid-state qubits. 2003 , 67,	2
1716	Quantum Adiabatic Evolution Algorithm for a Quantum Neural Network. 2003 , 951-958	2
1715	Polarization Spectroscopy of Charged Single Self-Assembled Quantum Dots. 2003 , 794, 171	
1714	ZEEMAN EFFECT FOR ELECTRONS AND HOLES IN Ge/Si QUANTUM DOTS. 2003 , 02, 511-519	
1713	Quantum computing in the solid state: the challenge of decoherence. 2003 , 361, 1441-50	14
1712	Classical versus quantum coherence. 2003 , 361, 379-90; discussion 391	3
1711	Scalable solid-state qubits: challenging decoherence and read-out. 2003 , 361, 1323-38	7
1710	Observation of Band Alignment Transition from Type-I to Type-II in AlInAs/AlGaAs Self-assembled Quantum Dots. 2003 , 72, 3271-3275	6
1709	Combined error correction techniques for quantum computing architectures. 2003 , 50, 1285-1297	13
1708	3-D self-consistent simulation of spin-qubit quantum dot circuit with integrated read-out.	
1707	Nuclear spin based quantum information processing at high magnetic fields. 2003 , 14, 515-522	7
1706	Non-ideal monitoring of a qubit state using a quantum tunnelling device. 2003 , 15, 8055-8064	14
1705	Coherent Coupling of Double Quantum Dots Embedded in a Mesoscopic Ring. 2003 , 20, 1574-1577	16
1704	Application of magnetic resonance force microscopy cyclic adiabatic inversion for a single-spin measurement. 2003 , 36, 4417-4432	11
1703	Spin-orbit-induced semiconductor spin guides. 2003 , 14, 882-885	5
1702	Topological quantum gates with quantum dots. 2003 , 5, S643-S646	3
1701	Rabi Oscillation of Exciton Dressed by Phonons In a Quantum Dot. 2003 , 20, 1568-1570	4

1700	Electron dynamics of an artificial atom probed by pulsed microwave spectroscopy. 2003 , 14, 60-64	6
1699	Fabrication and characterization of a SiGe double quantum dot structure. 2003 , 21, 2852	7
1698	Kondo effect and singlet-triplet splitting in coupled quantum dots in a magnetic field. 2003 , 62, 83-89	15
1697	Electrical pulse measurement, inelastic relaxation, and non-equilibrium transport in a quantum dot. 2003 , 15, R1395-R1428	45
1696	Spin blockade in ground-state resonance of a quantum dot. 2003 , 62, 712-718	35
1695	Artificial atoms and molecules for spintronic applications.	
1694	Quantum Chaos and Quantum Computing. 2003 , 72, 157-164	1
1693	Quantum Computation. 2003 ,	
1692	Effect of Multiple Charge Traps on Dephasing Rates of a Josephson Charge Qubit System. 2003 , 72, 2726-2729	2
1691	Semiconductor Nanostructures for Quantum Computation. 2004 , 315-326	
1690	Coulomb interaction in asymmetric triple-coupled quantum dots. 2004 , 19, S409-S411	5
1689	Quantum nonlocality of Heisenberg XX model with site-dependent coupling strength. 2004 , 37, 11475-11483	2
1688	Entangled electronic state via an interacting quantum dot. 2004 , 66, 624-630	3
1687	Few-electron double quantum dots. 2004 , 15, 609-613	21
1686	Spin Switch and Qubit Register from a Spin Particle Controlled by a Time-Dependent Magnetic Field. 2004 , 21, 778-781	5
1685	Electron wavepacket propagation in a chain of coupled quantum dots. 2004 , 16, 4991-5002	96
1684	Coherent electron wavepacket propagation and entanglement in array of coupled quantum dots. 2004 , 65, 297-303	99
1683	Micro-patterned (Zn,Be)Se/(Zn,Mn)Se resonant tunnelling diodes. 2004 , 19, 946-949	8

1682	Generation of Local Magnetic Field by Nano Electro-Magnets. 2004 , 43, 2054-2056		10
1681	Multi-terminal transport through a quantum dot in the Coulomb-blockade regime. 2004 , 67, 439-445		24
1680	Exciton entanglement in two coupled semiconductor microcrystallites. 2004 , 37, 4423-4436		15
1679	Giant Persistent Current in a Mesoscopic Ring with Parallel-Coupled Double Quantum Dots. 2004 , 21, 911-914		15
1678	Controlled decoherence of a charge qubit in a double quantum dot. 2004 , 22, 2035		26
1677	Manipulation of electronic states in single quantum dots by micromachined air-bridge. 2004 , 84, 1392-1394		7
1676	Two-photon coherent control of a single quantum dot. 2004 , 92, 227401		60
1675	Single-electron charging and detection in a laterally coupled quantum-dot circuit in the few-electron regime. 2004 , 69,		20
1674	Aharonov-Bohm physics with spin. II. Spin-flip effects in two-dimensional ballistic systems. 2004 , 69,		48
1673	Quantum computing in arrays coupled by always-on interactions. <i>Physical Review A</i> , 2004 , 70,	2.6	38
1672	Exchange energy tuned by asymmetry in artificial molecules. 2004 , 70,		32
1671	Scaling of entanglement at a quantum phase transition for a two-dimensional array of quantum dots. <i>Physical Review A</i> , 2004 , 70,	2.6	14
1670	Mesoscopic cavity quantum electrodynamics with quantum dots. <i>Physical Review A</i> , 2004 , 69,	2.6	158
1669	Spin qubits in multielectron quantum dots. 2004 , 69,		13
1668	Three-dimensional self-consistent simulations of symmetric and asymmetric laterally coupled vertical quantum dots. 2004 , 69,		11
1667	Monte Carlo method for a quantum measurement process by a single-electron transistor. 2004 , 70,		17
1666	Spin swap versus double occupancy in quantum gates. 2004 , 70,		7
1665	Quantum master equations for the superconductor-quantum dot entangler. 2004 , 70,		42

1664	Neutral and charged electron-hole complexes in artificial molecules: Quantum transitions induced by the in-plane magnetic field. 2004 , 70,		12
1663	Stochastic Liouville equation approach for the effect of noise in quantum computations. <i>Physical Review A</i> , 2004 , 69,	2.6	25
1662	Mimicking time evolution within a quantum ground state: Ground-state quantum computation, cloning, and teleportation. <i>Physical Review A</i> , 2004 , 70,	2.6	10
1661	Short-time decoherence for general system-environment interactions. <i>Physical Review A</i> , 2004 , 69,	2.6	50
1660	Twisted exchange interaction between localized spins embedded in a one- or two-dimensional electron gas with Rashba spin-orbit coupling. 2004 , 69,		133
1659	Noninvasive detection of the evolution of the charge states of a double dot system. 2004 , 69,		15
1658	Selective pulse implementation of two-qubit gates for spin-32-based fullerene quantum-information processing. <i>Physical Review A</i> , 2004 , 70,	2.6	19
1657	Molecular spintronics: Coherent spin transfer in coupled quantum dots. 2004 , 69,		28
1656	Single-qubit gates and measurements in the surface acoustic wave quantum computer. 2004 , 70,		27
1655	Selective spin coupling through a single exciton. 2004 , 93, 150502		46
1654	Electron-spin and electron-orbital dependence of the tunnel coupling in laterally coupled double vertical dots. 2004 , 93, 066806		35
1653	Control of bond formation, electron transport, and interference in a biased asymmetric parallel double-dot system. 2004 , 95, 3557-3560		3
1652	Transition between quantum states in a parallel-coupled double quantum dot. 2004 , 92, 176801		188
1651	Theory of excitonic spectra and entanglement engineering in dot molecules. 2004 , 93, 047401		82
1650	Cotunneling spectroscopy in few-electron quantum dots. 2004 , 93, 256801		120
1649	Chirality in quantum computation with spin cluster qubits. 2004 , 93, 120503		38
1648	Manipulation of a single charge in a double quantum dot. 2004 , 93, 186802		338
1647	Excited-state spectroscopy on a nearly closed quantum dot via charge detection. 2004 , 84, 4617-4619		97

1646	Spin polarization of excitons in nonmagnetic quantum dots induced by a neighboring magnetic semiconductor quantum well. 2004 , 95, 7184-7186		10
1645	Charge transport through open driven two-level systems with dissipation. 2004 , 69,		34
1644	Spin readout and initialization in a semiconductor quantum dot. 2004 , 92, 037901		45
1643	Polarization of nuclear spins from the conductance of quantum wire. 2004 , 93, 126601		24
1642	Capacitive coupling of atomic systems to mesoscopic conductors. 2004 , 92, 063601		122
1641	Spatially resolved manipulation of single electrons in quantum dots using a scanned probe. 2004 , 93, 216801		94
1640	Electrostatic cross-talk between quantum dot and quantum point contact charge read-out in few-electron quantum dot circuits. 2004 , 96, 7352-7356		1
1639	Competing mechanisms for singlet-triplet transition in artificial molecules. 2004 , 69,		30
1638	Generation of spatially separated spin entanglement in a triple-quantum-dot system. <i>Physical Review A</i> , 2004 , 69,	2.6	17
1637	Evolution of localized electron spin in a nuclear spin environment. 2004 , 70,		75
1636	Emission spectrum of a single quantum dot embedded in a p \bar{n} junction. 2004 , 69,		5
1635	Semiconductor few-electron quantum dot operated as a bipolar spin filter. 2004 , 70,		65
1634	Modeling of optical detection of spin-polarized carrier injection into light-emitting devices. 2004 , 69,		1
1633	Nuclear spin relaxation probed by a single quantum dot. 2004 , 69,		27
1632	Stability of strained heteroepitaxial systems in (1+1) dimensions. 2004 , 70,		1
1631	Spin injection into a single self-assembled quantum dot. 2004 , 69,		36
1630	Exchange interaction between three and four coupled quantum dots: Theory and applications to quantum computing. 2004 , 70,		27
1629	Experimental Hamiltonian identification for controlled two-level systems. <i>Physical Review A</i> , 2004 , 69,	2.6	46

1628	Spin-orbit coupling and intrinsic spin mixing in quantum dots. 2004 , 69,		66
1627	Electron spin teleportation current through a quantum dot array operating in the stationary regime. 2004 , 69,		23
1626	All-electrical quantum computation with mobile spin qubits. 2004 , 69,		28
1625	Magneto-optical rotation and cross-phase modulation via coherently driven four-level atoms in a tripod configuration. <i>Physical Review A</i> , 2004 , 70,	2.6	164
1624	Reexamination of some spintronic field-effect device concepts. 2004 , 85, 1433-1435		61
1623	Trapped electrons in vacuum for a scalable quantum processor. <i>Physical Review A</i> , 2004 , 70,	2.6	22
1622	Transport through a double quantum dot in the sequential tunneling and cotunneling regimes. 2004 , 69,		96
1621	Scanning tunneling microscope study of capped quantum dots. 2004 , 85, 2355-2357		3
1620	Nonequilibrium stabilization of charge states in double quantum dots. 2004 , 69,		4
1619	Measurement efficiency and n-shot readout of spin qubits. 2004 , 93, 106804		47
1618	Spin blockade in capacitively coupled quantum dots. 2004 , 85, 606-608		18
1617	Coulomb and spin blockade of two few-electron quantum dots in series in the cotunneling regime. 2004 , 70,		3
1616	Silicon quantum computation based on magnetic dipolar coupling. <i>Physical Review A</i> , 2004 , 70,	2.6	53
1615	Clausen-Horne inequality for electron-counting statistics in multiterminal mesoscopic conductors. 2004 , 69,		37
1614	Spin dynamics at very high spin polarization. 2004 , 70,		11
1613	Continuous quantum measurement: inelastic tunneling and lack of current oscillations. 2004 , 92, 136802		40
1612	Preparation of W, GHZ, and two-qutrit states using bimodal cavities. 2004 , 51, 1627-1636		28
1611	Epitaxial growth and properties of cobalt-doped ZnO on Al_2O_3 single-crystal substrates. 2004 , 70,		171

1610	Nonadiabatic electron manipulation in quantum dot arrays. 2004, 70,		39
1609	Electrical current noise of a beamsplitter as a test of spin entanglement. 2004, 70,		47
1608	Efficient quantum computation within a disordered Heisenberg spin chain. <i>Physical Review A</i> , 2004, 70,	2.6	8
1607	Spin dynamics of carriers in GaAs quantum wells in an external electric field. 2004, 69,		15
1606	Quantum entanglement of many atoms in spinor Bose-Einstein condensates. <i>Physical Review A</i> , 2004, 69,	2.6	8
1605	Symmetry of anisotropic exchange interactions in semiconductor nanostructures. 2004, 69,		56
1604	Electron and hole states in diluted magnetic semiconductor quantum dots. 2004, 69,		32
1603	Spin-mechanical device for detection and control of spin current by nanomechanical torque. 2004, 70,		44
1602	Theory of optical orientation in n-type semiconductors. 2004, 70,		26
1601	Spin-photon dynamics of quantum dots in two-mode cavities. 2004, 70,		19
1600	Multiqubit maximally entangled states in the NMR model. <i>Physical Review A</i> , 2004, 70,	2.6	4
1599	Localization of two interacting electrons in quantum dot arrays driven by an ac field. 2004, 69,		52
1598	Single-spin readout for buried dopant semiconductor qubits. 2004, 69,		32
1597	Dissipative dynamics of spins in quantum dots. 2004, 70,		12
1596	Theoretical investigation of a protected quantum bit in a small Josephson junction array with tetrahedral symmetry. 2004, 69,		2
1595	Landau Fermi-liquid picture of spin density functional theory: Strutinsky approach to quantum dots. 2004, 70,		12
1594	Practical scheme for error control using feedback. <i>Physical Review A</i> , 2004, 69,	2.6	54
1593	Microsecond spin-flip times in nGaAs measured by time-resolved polarization of photoluminescence. 2004, 69,		37

- 1592 Tunneling properties of quantum dot arrays in a strong magnetic field. **2004**, 70, 8
- 1591 Double quantum dot turnstile as an electron spin entangler. **2004**, 69, 28
- 1590 Valence-bond states for quantum computation. *Physical Review A*, **2004**, 70, 2.6 210
- 1589 Conditional sign flip via teleportation. *Physical Review A*, **2004**, 70, 2.6 5
- 1588 Time-resolved detection of individual electrons in a quantum dot. **2004**, 85, 2005-2007 111
- 1587 Spin filtering through a double-bend structure. **2004**, 85, 2547-2549 22
- 1586 Spin relaxation dynamics in highly uniform InAs quantum dots. **2004**, 84, 3576-3578 55
- 1585 Quantum antidot as a controllable spin injector and spin filter. **2004**, 85, 3136-3138 19
- 1584 Local gate control of a carbon nanotube double quantum dot. **2004**, 303, 655-8 167
- 1583 An Introduction to Semiconductor Spintronics. **2004**, 58, 1-72 15
- 1582 Synthesis of Monolayer-Capped GaAs Nanoparticles. **2004**, 828, 233
- 1581 Magneto-photoluminescence Studies of AlInAs/AlGaAs Self-assembled Quantum Dots with Type-II Band Alignment. **2004**, 73, 480-484
- 1580 Semiclassical Analysis of $1/f$ Noise in Josephson Qubits. **2004**, 237-245
- 1579 SPIN POLARON IN A QUANTUM DOT OF THE DILUTED MAGNETIC SEMICONDUCTORS. **2004**, 18, 419-426 21
- 1578 Spin-orbit coupling and magnetic spin states in cylindrical quantum dots. **2004**, 825, G4.6.1
- 1577 REALIZATION OF A TWO-QUBIT QUANTUM GATE UTILIZING EDGE STATES AROUND ANTIDOTS. **2004**, 03, 309-319 2
- 1576 MESOSCOPIC TRANSPORT THROUGH A QUANTUM DOT-CARBON NANOTUBE SYSTEM IN AN APPLIED MICROWAVE FIELD. **2004**, 18, 2071-2084 2
- 1575 QUANTUM PHASE GATING WITH SEMICONDUCTOR QUANTUM DOTS IN A MICROCAVITY. **2004**, 18, 1195-1203

1574	Femtosecond spectroscopy in semiconductors: a key to coherences, correlations and quantum kinetics. 2004 , 67, 433-512	157
1573	Current-Induced Entanglement of Nuclear Spins in Quantum Dots. 2004 , 73, 307-310	22
1572	Avoiding entanglement loss when two-qubit quantum gates are controlled by electronic excitation. 2004 , 16, 2757-2772	13
1571	Coherent spin manipulation without magnetic fields in strained semiconductors. 2004 , 427, 50-3	391
1570	Single-shot read-out of an individual electron spin in a quantum dot. 2004 , 430, 431-5	1190
1569	Electrical detection of the spin resonance of a single electron in a silicon field-effect transistor. 2004 , 430, 435-9	255
1568	Optically programmable electron spin memory using semiconductor quantum dots. 2004 , 432, 81-4	764
1567	Charge qubit rotations in a double-dot nanostructure. 2004 , 80, 503-506	12
1566	Zeeman energy and anomalous spin splitting in lateral GaAs quantum dots. 2004 , 39, 87-92	13
1565	Spintronics: Fundamentals and applications. 2004 , 76, 323-410	8168
1564	Quantum tomography for solid-state qubits. 2004 , 67, 874-880	21
1563	Mirror inversion of quantum states in linear registers. 2004 , 93, 230502	196
1562	Jahn-Teller effect in multi-spin systems with high exchange interaction: Ground state problem for V15 nanocluster. 2004 , 69,	12
1561	Theory of quantum optical control of a single spin in a quantum dot. 2004 , 69,	143
1560	Entanglement and Zeeman interaction in diluted magnetic semiconductor quantum dot. 2004 , 350, 305-312	3
1559	Electron spin operation by electric fields: spin dynamics and spin injection. 2004 , 20, 189-195	71
1558	Transport measurements through stacked InAs self-assembled quantum dots in time domain. 2004 , 21, 460-463	3
1557	Coulomb blockade in triangular lateral small-size quantum dots. 2004 , 21, 469-473	

1556	High-finesse optical quantum gates for electron spins in artificial molecules. 2004 , 21, 1061-1064	
1555	Spin-orbit interaction and spin relaxation in a lateral quantum dot. 2004 , 22, 414-417	12
1554	Electron-hole bilayer quantum dots: phase diagram and exciton localization. 2004 , 130, 187-191	8
1553	Non-Markovian Dynamics of a Localized Electron Spin Due to the Hyperfine Interaction. 2004 , 158, 235-243	
1552	Optically Driven Quantum Computing Devices Based on Semiconductor Quantum Dots. 2004 , 3, 147-161	1
1551	Bang-Bang Refocusing of a Qubit Exposed to Telegraph Noise. 2004 , 3, 247-272	10
1550	Spin-Based Quantum Dot Quantum Computing in Silicon. 2004 , 3, 133-146	67
1549	Controlling Spin Qubits in Quantum Dots. 2004 , 3, 115-132	46
1548	Spintronics and spintronics materials. 2004 , 53, 2357-2405	60
1547	Non-Markovian effects on quantum superpositions in a nanostructure. 2004 , 35, 95-96	
1546	Persistent current oscillations in a series-coupled double quantum dot embedded in a mesoscopic ring. 2004 , 241, 1299-1305	1
1545	Optically controlled magnetization of zero-dimensional magnetic polarons in CdMnTe self-assembled quantum dots. 2004 , 241, 656-659	1
1544	Magneto-photoluminescence study on magnetic/non-magnetic semiconductor coupled quantum dots. 2004 , 241, 722-726	1
1543	Decoherence and quantum entangled exciton states in semiconductor quantum dot molecule. 2004 , 1, 598-602	2
1542	Exciton dynamics in quantum nano-structures of II-VI diluted magnetic semiconductors fabricated by electron-beam lithography. 2004 , 1, 941-944	5
1541	Zeeman coupling and Swap action in spin-based diluted magnetic semiconductor quantum dot quantum computer. 2004 , 1, 1976-1980	
1540	Physics and applications of self-assembled quantum dots. 2004 , 1, 2131-2159	6
1539	Probing coherent electronic states in double quantum dots. 2004 , 1, 2094-2110	3

1538	Nonlinear Liouville equation, project Green function and stabilizing quantum computing. 2004 , 333, 197-224	4
1537	Theory of spin precession monitored by laser pulse. 2004 , 132, 129-134	29
1536	Dependence of optically oriented and detected electron spin resonance on donor concentration in n-GaAs. 2004 , 132, 613-616	12
1535	Quantum information processing and entanglement in solid state devices. 2004 , 5, 295-299	6
1534	Quantum logic gate of a small ring with quantum dots. 2004 , 272-276, 1662-1663	
1533	Control of type-I and type-II band alignments in AlInAs/AlGaAs self-assembled quantum dots by changing AlGaAs compositions. 2004 , 21, 308-311	9
1532	Fabrication of double quantum dots by combining afm and e-beam lithography. 2004 , 21, 483-486	4
1531	Growth process of quantum dots precisely controlled by an AFM-assisted technique. 2004 , 21, 625-630	20
1530	High-frequency manipulation of few-electron double quantum dots toward spin qubits. 2004 , 22, 518-521	26
1529	Non-invasive detection of the ionic and covalent charge states of an isolated double dot system. 2004 , 22, 522-525	2
1528	Entanglement of an exciton in a quantum dot molecule in radiation pulses. 2004 , 23, 193-197	1
1527	Entangled Bell states of two electrons in coupled quantum dots phonon decoherence. 2004 , 24, 234-243	5
1526	Tunable few-electron double quantum dots with integrated charge read-out. 2004 , 25, 135-141	7
1525	Coherent optical control of semiconductor quantum dots for quantum information processing. 2004 , 25, 242-248	14
1524	Decoupling neighboring qubits in quantum computers through bang-bang pulse control. 2004 , 327, 391-396	6
1523	Properties of the ground state of parallel double quantum dots embedded in a mesoscopic ring. 2004 , 327, 500-505	
1522	Quantum entanglement in an asymmetric two-electron system driven by an ac electric field. 2004 , 328, 400-406	3
1521	Quantum CPF gates between rare earth ions through measurement. 2004 , 330, 137-141	16

1520	BCS-like modewise entanglement of fermion Gaussian states. 2004 , 331, 39-44	31
1519	The dynamics of coherently driven exciton in a single quantum dot. 2004 , 333, 310-315	8
1518	Coulomb interaction energy in optical and quantum computing applications of self-assembled quantum dots. 2004 , 75, 43-53	12
1517	Coherence control for qubits. 2004 , 296, 307-314	28
1516	Two-dimensional nuclear magnetic resonance spectroscopy in optically pumped semiconductors. 2004 , 397, 96-100	9
1515	Non-Markovian dynamics in a spin star system: Exact solution and approximation techniques. 2004 , 70,	190
1514	Charge detection enables free-electron quantum computation. 2004 , 93, 020501	137
1513	Electron spin qubits in quantum dots.	0
1512	. 2004 , 3, 10-16	7
1511	Tunable nonlocal spin control in a coupled-quantum dot system. 2004 , 304, 565-7	300
1510	Coulomb blockade in a silicon/silicon-germanium two-dimensional electron gas quantum dot. 2004 , 84, 4047-4049	48
1509	Redistribution dynamics of optically generated charges in In(Ga)As/GaAs self-assembled quantum dots. 2004 , 85, 2592-2594	6
1508	Quantum computing using single photons and the Zeno effect. <i>Physical Review A</i> , 2004 , 70,	2.6 136
1507	. 2004 ,	
1506	Overview of quantum error prevention and leakage elimination. 2004 , 51, 2449-2460	36
1505	Entanglement and quantum computing with ballistic electrons. 2004 , 19, S113-S117	7
1504	Coherent control of tunneling in a quantum dot molecule. 2004 , 69,	202
1503	Universal quantum computation through control of spin-orbit coupling. 2004 , 93, 140501	66

1502	Nucleation and growth of GaN/AlN quantum dots. 2004 , 70,		41
1501	Resonant spin Hall conductance in two-dimensional electron systems with a Rashba interaction in a perpendicular magnetic field. 2004 , 92, 256603		142
1500	Chains of Artificial Atoms in a Magnetic Field. 2004 , 108, 2873-2879		3
1499	Valley splitting in low-density quantum-confined heterostructures studied using tight-binding models. 2004 , 70,		88
1498	Three- and four-body interactions in spin-based quantum computers. 2004 , 92, 077903		31
1497	Few-Electron Quantum Dots in Nanowires. 2004 , 4, 1621-1625		253
1496	Decoherence of two Josephson charge qubits coupled via δ -type coupling and exposed to δ noise. <i>Physical Review A</i> , 2004 , 69,	2.6	3
1495	Gate Errors in Solid-State Quantum Computer Architectures. 2004 , 193-199		
1494	Quantum Computing with Electron Spins in Quantum Dots. 2004 , 201-209		
1493	Electronic correlations in coherent transport through a two quantum dot system. 2004 , 70,		55
1492	Quantum logic gates using Stark-shifted Raman transitions in a cavity. <i>Physical Review A</i> , 2004 , 69,	2.6	72
1491	Multi-qubit gates in arrays coupled by 'always-on' interactions. 2004 , 6, 61-61		14
1490	Multiscale modelling of nanostructures. 2004 , 16, R1537-R1576		79
1489	Possible indication of interlayer exchange coupling in GaMnAs/GaAs ferromagnetic semiconductor superlattices. 2004 , 95, 7402-7404		29
1488	. 2004 , 3, 165-172		10
1487	Phonon-Induced Decay of the Electron Spin in Quantum Dots. 2004 , 93,		351
1486	Magneto-optical properties of a highly transparent cadmium ferrite-based magnetic fluid. 2004 , 84, 2355-2357	49	
1485	Quantum measurement in charge representation. 2004 , 70,		23

1484	Exponentially localized magnetic fields for single-spin quantum logic gates. 2004 , 96, 754-758	22
1483	Probing the spin state of a single magnetic ion in an individual quantum dot. 2004 , 93, 207403	311
1482	Optical probing of the spin state of a single magnetic impurity in a self-assembled quantum dot. 2004 , 70,	54
1481	Renormalization of spin-orbit coupling in quantum dots due to the Zeeman interaction. 2004 , 70,	13
1480	Spin-orbit and electronic interactions in narrow-gap quantum dots. 2004 , 70,	39
1479	Energy levels of a parabolically confined quantum dot in the presence of spin-orbit interaction. 2004 , 95, 6368-6373	44
1478	Teleportation on a quantum dot array. 2004 , 93, 120502	29
1477	Error rate of a charge qubit coupled to an acoustic phonon reservoir. <i>Physical Review A</i> , 2004 , 69,	2.6 111
1476	Quantum tensor product structures are observable induced. 2004 , 92, 060402	154
1475	Electron spin and charge switching in a coupled quantum-dot-quantum ring system. 2004 , 70,	30
1474	Interfacing quantum-optical and solid-state qubits. 2004 , 92, 247902	105
1473	Perfect state transfer in quantum spin networks. 2004 , 92, 187902	806
1472	Dephasing of Coupled Spin Qubit System during Gate Operations Due to Background Charge Fluctuations. 2004 , 73, 3266-3269	
1471	Spin-based quantum gating with semiconductor quantum dots by bichromatic radiation method. 2004 , 66, 14-20	19
1470	Influence of inter-dot coupling on spin polarization of carriers in double quantum dots. 2004 , 19, 1125-1130	20
1469	New All-Electrical Measurement Schemes Can Detect the Spin State of a Single Electron. 2004 , 57, 22-24	14
1468	Nonadiabatic Electron Manipulation in a Quantum-Dots Array and Related Transport Phenomena. 2005 , 74, 256-260	1
1467	Quantum dots in Si/SiGe 2DEGs with Schottky top-gated leads. 2005 , 7, 246-246	28

1466	Optically stimulated and spontaneously generated electron spin coherence in quantum dots.	
1465	Spatially highly resolved study of AFM scanning tip-quantum dot local interaction. 2005 , 7, 185-185	18
1464	Clauser-Horne inequality for the full counting statistics. 2005 , 7, 183-183	3
1463	Spin filling of a quantum dot derived from excited-state spectroscopy. 2005 , 7, 182-182	25
1462	Single-spin measurement using spin-orbital entanglement. 2005 , 7, 120-120	14
1461	Trapped-ion qutrit spin molecule quantum computer. 2005 , 7, 174-174	23
1460	Implementing controlled-NOT gate based on free spin qubits with semiconductor quantum-dot array. 2005 , 71, 524-529	4
1459	Hanle effect in transport through quantum dots coupled to ferromagnetic leads. 2005 , 72, 294-300	25
1458	Magnetic-field-dependent optical properties and interdot correlations in coupled quantum dots. 2005 , 112, 109-112	1
1457	Coupling-dependent spin polarization of quantum dots in double layer geometry. 2005 , 275, e2295-e2300	1
1456	Polarization-selective magneto-photoluminescence study on CdSe self-assembled quantum dots by resonant excitation. 2005 , 275, e2301-e2306	4
1455	Magneto conductance for tunnelling through double magnetic barriers. 2005 , 25, 339-346	24
1454	Spin-spin interaction in magnetic semiconductor quantum dots. 2005 , 26, 37-44	20
1453	Polarization spectroscopy of positive and negative trions in an InAs quantum dot. 2005 , 26, 55-58	13
1452	Spin effects in a quantum ring. 2005 , 26, 225-230	8
1451	Experimental demonstration of coherent coupling of two quantum dots. 2005 , 26, 281-285	2
1450	Magneto-optical study of nonmagnetic quantum dots coupled to a magnetic semiconductor quantum well. 2005 , 26, 271-275	4
1449	Suppression of acoustic-phonon-induced electron transitions in coupled quantum dots. 2005 , 26, 427-431	11

1448	Observation of Overhauser shift in a self-assembled InAlAs quantum dot. 2005 , 29, 510-514	7
1447	Quantum entanglement formation by repeated spin blockade measurements in a spin field-effect transistor structure embedded with quantum dots. 2005 , 29, 674-678	8
1446	Magnetic impurity effects on the entanglement of three-qubit Heisenberg XY chain with intrinsic decoherence. 2005 , 334, 109-116	28
1445	Localization of two interacting electrons in quantum dot array. 2005 , 337, 241-246	7
1444	Engineering antiferromagnetic Heisenberg spin chains for maximizing of the groundstate entanglement. 2005 , 342, 30-35	8
1443	Tunable superconductive tunneling through diluted magnetic semiconductor heterostructures. 2005 , 344, 303-306	1
1442	Phonon effect on an optically driven quantum dots device. 2005 , 347, 251-254	5
1441	Coherent and collective quantum optical effects in mesoscopic systems. 2005 , 408, 315-474	348
1440	AF molecular rings for quantum computation. 2005 , 24, 2562-2567	8
1439	Formulation of master equation approach involving spin-phonon coupling: Toward an understanding of spin dynamics in magnetic dendrimers. 2005 , 24, 2653-2657	7
1438	Electronic properties of interacting quantum dots. 2005 , 36, 1052-1054	
1437	Computing with spins: from classical to quantum computing. 2005 , 37, 77-86	20
1436	Control of spin state in CdSe quantum dots by coupling with magnetic semiconductor quantum dots. 2005 , 135, 471-474	3
1435	Voltage-controlled coded qubit based on electron spin. 2005 , 136, 508-512	54
1434	Buckyball quantum computer: realization of a quantum gate. 2005 , 48, 199-206	3
1433	Quantum information processing and communication. 2005 , 36, 203-228	228
1432	Recipes for spin-based quantum computing. 2005 , 16, R27-R49	156
1431	Quantum Information. 2005 , 30, 99-104	2

1430	Selective electron transfer between quantum dots induced by a resonance pulse. 2005 , 39, 235	6
1429	Auxiliary-level-assisted operations with charge qubits in semiconductors. 2005 , 100, 857-866	4
1428	Amplitude of Aharonov-Bohm oscillations in a small semiconductor ring interferometer in the tunneling regime. 2005 , 82, 89-92	2
1427	Spin splitting of the X-valley donor impurity states in AlAs barriers and the spatial distribution of the probability density of their wave functions. 2005 , 39, 1162	
1426	Hole spin relaxation in Ge quantum dots. 2005 , 82, 302-305	7
1425	Fault-tolerant architecture for quantum computation using electrically controlled semiconductor spins. 2005 , 1, 177-183	310
1424	Triplet-singlet spin relaxation via nuclei in a double quantum dot. 2005 , 435, 925-8	421
1423	Probing carrier dynamics in nanostructures by picosecond cathodoluminescence. 2005 , 438, 479-82	131
1422	Three-dimensional self-consistent modelling of spin-qubit quantum dot devices. 2005 , 152, 377	4
1421	Double-island single-electron transistor operated at radio-frequency for sensitive and fast charge detection. 2005 , 78-79, 218-223	2
1420	Spin quantum computation in silicon nanostructures. 2005 , 133, 737-746	61
1419	Electron Spin Coherence of Phosphorus Donors in Isotopically Purified ²⁹ Si. 2005 , 18, 157-161	6
1418	Giant Zeeman Effects and Spin Dynamics of Excitons in Dense Self-Organized Quantum Dots of CdSe and Cd _{1-x} Mn _x Se. 2005 , 18, 219-222	4
1417	Charging and Spin Effects in Triple Dot Artificial Molecules. 2005 , 18, 223-227	22
1416	Voltage-Controlled Electron-Hole Interaction in a Single Quantum Dot. 2005 , 18, 245-249	3
1415	Simulation of Spin-Qubit Quantum Dot Circuit with Integrated Quantum Point Contact Read-Out. 2005 , 4, 111-114	
1414	Spin-Based Quantum Information Processing in Magnetic Quantum Dots. 2005 , 12, 133-141	1
1413	Quantum dynamics in high-spin molecules, spin dendrimers, and spin lattices. 2005 , 105, 615-627	10

1412	Dry Etching of Electronic Oxides, Polymers, and Semiconductors. 2005 , 2, 16-37	86
1411	Optical probing of the spin state of a single magnetic ion in an individual quantum dot. 2005 , 242, 1237-1241	5
1410	Silicon-based spin and charge quantum computation. 2005 , 77, 201-222	6
1409	Physics. Fingerprinting spin qubits. 2005 , 309, 565-7	5
1408	Can We Build a Large-Scale Quantum Computer Using Semiconductor Materials?. 2005 , 30, 105-110	14
1407	Electrically-driven Spontaneous Emission Spectrum of a Single Quantum Dot. 2005 , 74, 690-699	1
1406	Hydrogen Donors in ZnO. 2005 , 864, 1041	4
1405	Landau-Zener transitions in qubits controlled by electromagnetic fields. 2005 , 7, 218-218	46
1404	QUANTUM COMPUTATION BASED ON ELECTRON SPIN QUBITS WITHOUT SPIN-SPIN INTERACTION. 2005 , 03, 155-162	
1403	Singlet-Triplet Transition in Quantum Dots Confined by Triangular and Bowl-Like Potentials: the Effect of Electric Fields. 2005 , 22, 2371-2374	5
1402	Proposal for measuring the entanglement of nearby spins by multiphoton interference. 2005 , 71, 387-393	
1401	Towards deterministic optical quantum computation with coherently driven atomic ensembles. 2005 , 7, S141-S151	26
1400	REALISTIC SIMULATIONS OF SINGLE-SPIN MEASUREMENT VIA MAGNETIC RESONANCE FORCE MICROSCOPY. 2005 , 03, 1-9	2
1399	Two-Qubit Quantum Logic Gate in Molecular Magnets. 2005 , 22, 2147-2150	5
1398	Mesoscopic scattering of spin particles. 2005 , 38, 7807-7830	5
1397	Manipulation of tunnelling in a quantum dot array. 2005 , 17, 4207-4222	2
1396	Intrinsic spin dynamics in semiconductor quantum dots. 2005 , 16, 2804-2807	
1395	Electron-nuclear spin transfer in quantum-dot networks. 2005 , 16, S266-S272	1

1394	Elliptical orbits in the Bloch sphere. 2005 , 7, S277-S282			5
1393	Three-dimensional self-consistent simulation of single-qubit operation by modulation of the hyperfine interaction in phosphors-doped metal-oxide-semiconductor structure. 2005 , 98, 093704			5
1392	Readout of single spins via Fano resonances in quantum point contacts. 2005 , 87, 192501			12
1391	Electron and hole spin dynamics in semiconductor quantum dots. 2005 , 86, 113111			32
1390	Nuclear spin diffusion in quantum dots: Effects of inhomogeneous hyperfine interaction. 2005 , 72,			36
1389	Controlled phase gate for solid-state charge-qubit architectures. <i>Physical Review A</i> , 2005 , 71,	2.6		10
1388	Fast partial decoherence of a superconducting flux qubit in a spin bath. 2005 , 71,			1
1387	Quantum-state transmission via a spin ladder as a robust data bus. <i>Physical Review A</i> , 2005 , 71,	2.6		111
1386	Conduction electrons and the decoherence of impurity-bound electrons in a semiconductor. 2005 , 72,			5
1385	Pauli spin blockade in cotunneling transport through a double quantum dot. 2005 , 72,			34
1384	Rashba control for the spin excitation of a fully spin-polarized vertical quantum dot. 2005 , 71,			17
1383	Low-temperature decoherence of qubit coupled to background charges. 2005 , 72,			40
1382	Hole spin relaxation during the tunneling between coupled quantum dots. 2005 , 71,			16
1381	Electric field control and optical signature of entanglement in quantum dot molecules. 2005 , 72,			31
1380	Fast quantum modular exponentiation. <i>Physical Review A</i> , 2005 , 71,	2.6		71
1379	dc modulation in field-effect transistors operating under microwave irradiation for quantum readout. 2005 , 98, 044505			10
1378	Electronic asymmetry in self-assembled quantum dot molecules made of identical InAs/GaAs quantum dots. 2005 , 72,			22
1377	Quantum coherence in a model of strongly correlated quantum dots. 2005 , 72,			

1376	Entanglement and quantum-state engineering in the optically driven two-electron double-dot structure. <i>Physical Review A</i> , 2005 , 72,	2.6	26
1375	Dynamical responses of quantum dots by pulsed fields. 2005 , 71,		4
1374	Asymmetric exchange between electron spins in coupled semiconductor quantum dots. 2005 , 72,		18
1373	Spin polarization in a two-dimensional electron gas modulated periodically by ferromagnetic and Schottky metal stripes. 2005 , 72,		49
1372	Generation of quantum logic operations from physical Hamiltonians. <i>Physical Review A</i> , 2005 , 71,	2.6	24
1371	Charge sensing of an artificial H ₂ ⁺ molecule in lateral quantum dots. 2005 , 72,		44
1370	Optically induced spin-to-charge transduction in donor-spin readout. 2005 , 72,		13
1369	Long spin relaxation in self-assembled InAlAs quantum dots observed by heterodyne four-wave mixing. 2005 , 86, 063114		19
1368	Singlet-triplet splitting, correlation, and entanglement of two electrons in quantum dot molecules. 2005 , 72,		35
1367	Quantum dynamics of spins coupled by electrons in a one-dimensional channel. 2005 , 72,		4
1366	Coherent rotations of a single spin-based qubit in a single quantum dot at fixed Zeeman energy. 2005 , 71,		11
1365	Spin relaxation and decoherence of two-level systems. 2005 , 72,		14
1364	Intrinsic phonon decoherence and quantum gates in coupled lateral quantum-dot charge qubits. 2005 , 72,		31
1363	Robust two-qubit quantum registers. 2005 , 94, 040506		28
1362	Spin-polarized reflection in a two-dimensional electron system. 2005 , 86, 032113		46
1361	Quantum trajectories for the realistic measurement of a solid-state charge qubit. 2005 , 71,		21
1360	Charge sensing of excited states in an isolated double quantum dot. 2005 , 71,		20
1359	Impurity and boundary effects in one- and two-dimensional inhomogeneous Heisenberg antiferromagnets. 2005 , 71,		13

1358	Exchange gate in solid-state spin-quantum computation: The applicability of the Heisenberg model. <i>Physical Review A</i> , 2005 , 71,	2.6	52
1357	Broken symmetry and quantum entanglement of an exciton in $\text{In}_x\text{Ga}_{1-x}\text{As}/\text{GaAs}$ quantum dot molecules. 2005 , 71,		64
1356	Shot-noise and conductance measurements of transparent superconductor/two-dimensional electron gas junctions. 2005 , 72,		31
1355	Effect of spin-dependent Mn^{2+} internal transitions in $\text{CdSe}/\text{In}_x\text{Mn}_{1-x}\text{Se}$ magnetic semiconductor quantum dot systems. 2005 , 72,		39
1354	Double occupancy errors in quantum computing operations: Corrections to adiabaticity. 2005 , 71,		10
1353	Strongly correlated regimes in a double quantum dot device. 2005 , 71,		122
1352	Two-electron lateral quantum-dot molecules in a magnetic field. 2005 , 72,		41
1351	Spin manipulation of free two-dimensional electrons in Si/SiGe quantum wells. 2005 , 94, 126802		81
1350	Continuum and discrete excitation spectrum of single quantum rings. 2005 , 72,		44
1349	Spin-polarized electron transport through nanometer-scale Al grains. 2005 , 72,		36
1348	Anisotropic electron g factor in quantum dots with spin-orbit interaction. 2005 , 71,		28
1347	Anisotropic exchange interaction induced by a single photon in semiconductor microcavities. 2005 , 72,		11
1346	Electron spin resonance in a wide parabolic quantum well. 2005 , 72,		8
1345	Spin accumulation in degenerate semiconductors near modified Schottky contact with ferromagnets: Spin injection and extraction. 2005 , 72,		22
1344	Spin-selective optical absorption of singly charged excitons in a quantum dot. 2005 , 86, 221905		46
1343	Spin configurations in circular and rectangular vertical quantum dots in a magnetic field: Three-dimensional self-consistent simulations. 2005 , 72,		16
1342	Exciton states and their entanglement in coupled quantum dots. 2005 , 72,		20
1341	Spin-current noise and Bell inequalities in a realistic superconductor-quantum dot entangler. 2005 , 72,		26

1340	Electronic entanglement purification scheme enhanced by charge detections. <i>Physical Review A</i> , 2005 , 71,	2.6	36
1339	Charge oscillations in quantum dots: Renormalization group and Hartree method calculations. 2005 , 72,		52
1338	Single-wall nanotubes: Atomiclike behavior and microscopic approach. 2005 , 71,		20
1337	Two electrons in a strongly coupled double quantum dot: From an artificial helium atom to a hydrogen molecule. 2005 , 72,		27
1336	Population inversion of a driven two-level system in a structureless bath. 2005 , 95, 106801		51
1335	Effects of a nonlinear bath at low temperatures. 2005 , 72,		3
1334	Dynamic generation of orbital quasiparticle entanglement in mesoscopic conductors. 2005 , 71,		41
1333	Efficiency of the ground-state quantum computer. <i>Physical Review A</i> , 2005 , 71,	2.6	3
1332	Global control and fast solid-state donor electron spin quantum computing. 2005 , 72,		67
1331	Spin susceptibilities, spin densities, and their connection to spin currents. 2005 , 71,		63
1330	Phase effects on the conductance through parallel double dots. 2005 , 72,		17
1329	Atomistic theory of coherent spin transfer between molecularly bridged quantum dots. 2005 , 72,		5
1328	Site-controlled photoluminescence at telecommunication wavelength from InAs/InP quantum dots. 2005 , 86, 113118		44
1327	Thermopower of a Kondo spin-correlated quantum dot. 2005 , 95, 176602		198
1326	Engineering very-high-n polarized Rydberg states using tailored half-cycle-pulse sequences. 2005 , 95, 163007		10
1325	Fault-tolerant quantum computation via exchange interactions. 2005 , 94, 040507		27
1324	Size-dependent spintronic properties of dilute magnetic semiconductor nanocrystals. 2005 , 94, 236801		91
1323	Laser-controlled local magnetic field with semiconductor quantum rings. 2005 , 72,		51

1322	Teleportation of electronic many-qubit states encoded in the electron spin of quantum dots via single photons. 2005 , 94, 107401		59
1321	Finite-bias charge detection in a quantum dot. 2005 , 72,		11
1320	Light-induced Knight shifts in GaAs _{1-x} Ga _x As quantum wells. 2005 , 71,		6
1319	Characterization of a silicon-germanium quantum dot structure at 4.2K and 40mK. 2005 , 97, 063710		9
1318	Experimental evidence for antiferromagnetic spin-spin interaction between carriers localized in coupled quantum dots. 2005 , 86, 033114		17
1317	Electron spin tomography through counting statistics: A quantum trajectory approach. 2005 , 71,		5
1316	Electrical readout of a spin qubit without double occupancy. 2005 , 71,		20
1315	Nonperturbative bounds on electron spin coherence times induced by hyperfine interactions. 2005 , 71,		21
1314	Simulation of Heisenberg XY interactions and realization of a perfect state transfer in spin chains using liquid nuclear magnetic resonance. <i>Physical Review A</i> , 2005 , 72,	2.6	78
1313	Time-evolution simulation of a controlled-NOT gate with two coupled asymmetric quantum dots. <i>Physical Review A</i> , 2005 , 71,	2.6	7
1312	Indirect coupling between spins in semiconductor quantum dots. 2005 , 71,		12
1311	Three electrons in laterally coupled quantum dots: Tunnel vs electrostatic coupling, ground-state symmetry, and interdot correlations. 2005 , 71,		7
1310	Interplay between electron spin and orbital pseudospin in double quantum dots. 2005 , 72,		5
1309	Thermal entanglement properties of small spin clusters. <i>Physical Review A</i> , 2005 , 72,	2.6	46
1308	Singlet-triplet decoherence due to nuclear spins in a double quantum dot. 2005 , 72,		163
1307	Probing level renormalization by sequential transport through double quantum dots. 2005 , 72,		66
1306	Optimal two-qubit quantum circuits using exchange interactions. <i>Physical Review A</i> , 2005 , 72,	2.6	26
1305	Global thermal entanglement in n-qubit systems. <i>Physical Review A</i> , 2005 , 72,	2.6	32

1304	Friedel sum rule for relativistic spin-1/2 systems. <i>Physical Review A</i> , 2005 , 72,	2.6	26
1303	Spin splitting of X-valley-related donor impurity states in an AlAs barrier. 2005 , 71,		9
1302	Imaging of magnetic nanodots on self-organized semiconductor substrates. 2005 , 71,		10
1301	Quantum computing with spin qubits interacting through delocalized excitons: Overcoming hole mixing. 2005 , 72,		22
1300	Temperature behavior of hot carrier dynamics in InP quantum dots. 2005 , 71,		6
1299	Cluster states from Heisenberg interactions. <i>Physical Review A</i> , 2005 , 71,	2.6	60
1298	Energetic suppression of decoherence in exchange-only quantum computation. <i>Physical Review A</i> , 2005 , 72,	2.6	20
1297	Path-integral Monte Carlo simulations for interacting few-electron quantum dots with spin-orbit coupling. 2005 , 72,		27
1296	Deterministic quantum logic with photons via optically induced photonic band gaps. <i>Physical Review A</i> , 2005 , 71,	2.6	65
1295	Excitonic dynamics in a single quantum dot within a microcavity. 2005 , 71,		15
1294	Oscillatory spin relaxation rates in quantum dots. 2005 , 72,		29
1293	Photon-spin qubit-conversion based on Overhauser shift of Zeeman energies in quantum dots. 2005 , 87, 112506		23
1292	Single-shot readout of electron spin states in a quantum dot using spin-dependent tunnel rates. 2005 , 94, 196802		257
1291	Generating spin-entangled electron pairs in normal conductors using voltage pulses. 2005 , 72,		28
1290	Nanofabrication aspects of silicon-based spin quantum gates. 2005 , 4, 113-115		5
1289	Direct control of the tunnel splitting in a one-electron double quantum dot. 2005 , 72,		64
1288	Quantum computation with diatomic bits in optical lattices. <i>Physical Review A</i> , 2005 , 72,	2.6	33
1287	Single-hole transistor in p-type GaAs/AlGaAs heterostructures. 2005 , 87, 232108		32

1286	Electrical pump-and-probe study of spin singlet-triplet relaxation in a quantum dot. 2005 , 95, 056803	35
1285	Photon statistics from coupled quantum dots. 2005 , 95, 137403	93
1284	Solid-state circuit for spin entanglement generation and purification. 2005 , 94, 236803	48
1283	Spin relaxation in a quantum dot due to Nyquist noise. 2005 , 71,	19
1282	Theory of dynamical control of qubit decay and decoherence. 2005 , 4, 116-123	16
1281	Strong anisotropic spin dynamics in narrow n-InGaAs/AlGaAs (110) quantum wells. 2005 , 87, 171905	17
1280	Swapping Kondo resonances in coupled double quantum dots. 2005 , 72,	8
1279	Nuclear spin-lattice relaxation in superlattices. 2005 , 4, 83-89	
1278	Decoherence of nuclear spin quantum memory in a quantum dot. 2005 , 4, 35-39	5
1277	Ruderman-Kittel-Kasuya-Yosida and magnetic-field interactions in coupled Kondo quantum dots. 2005 , 94, 086602	94
1276	Conditional quantum phase gate using distant atoms and linear optics. <i>Physical Review A</i> , 2005 , 71, 2.6	31
1275	Quantum information storage and state transfer based on spin systems. 2005 , 31, 686-694	26
1274	THE LOSS OF FIDELITY DUE TO QUANTUM LEAKAGE FOR JOSEPHSON CHARGE QUBITS. 2005 , 19, 371-378	2
1273	Spin-based Quantum Dot Quantum Computing in Silicon. 2005 , 133-146	1
1272	Electrical addressing of confined quantum systems for quasiclassical computation and finite state logic machines. 2005 , 102, 5653-8	38
1271	Fermionic bell-state analyzer for spin qubits. 2005 , 309, 586-8	82
1270	Creation of Multipartite Entanglement and Entanglement Transfer via Heisenberg Interaction. 2005 , 22, 2143-2146	18
1269	Single-electron delocalization in hybrid vertical-lateral double quantum dots. 2005 , 309, 268-71	114

1268	Single photon SWAP gate using electromagnetically induced transparency. <i>Physical Review A</i> , 2005 , 71,	2.6	9
1267	An introduction to quantum information processing: applications and realizations. 2005 , 46, 407-436		52
1266	Theory of control of the spin-photon interface for quantum networks. 2005 , 95, 030504		142
1265	Coherent manipulation of coupled electron spins in semiconductor quantum dots. 2005 , 309, 2180-4		2345
1264	Prospects for Quantum Dot Implementation of Adiabatic Quantum Computers for Intractable Problems. 2005 , 93, 1765-1771		9
1263	Tunable Fano effect in parallel-coupled double quantum dot system. 2005 , 71,		147
1262	Tuning the nonlocal spin-spin interaction between quantum dots with a magnetic field. 2005 , 94, 036803		13
1261	Geometrical effects on the optical properties of quantum dots doped with a single magnetic atom. 2005 , 95, 047403		82
1260	Bridging dimensions: demultiplexing ultrahigh-density nanowire circuits. 2005 , 310, 465-8		169
1259	Resonant spikes of the nuclear spin qubits relaxation rate in quantum-Hall systems with magnetic impurities. 2005 , 4, 52-56		
1258	Charge qubits in semiconductor quantum computer architecture: Tunnel coupling and decoherence. 2005 , 71,		44
1257	Carrier-induced spin splitting of an individual magnetic atom embedded in a quantum dot. 2005 , 71,		76
1256	Fluctuators and qubits: coherent quantum oscillations. 2005 , 17, L385-L391		2
1255	Quantum computing on long-lived donor states of Li in Si. 2005 , 72,		28
1254	Imaging a single-electron quantum dot. 2005 , 5, 223-6		72
1253	Evidence of correlation in spin excitations of few-electron quantum dots. 2005 , 95, 266806		43
1252	Magneto-resistively detected electron spin resonance in low-density two-dimensional electron gas in GaAs-AlGaAs single quantum wells. 2005 , 4, 100-105		2
1251	Three-qubit thermal entanglement via entanglement swapping on two-qubit Heisenberg XY chains. <i>Physical Review A</i> , 2005 , 72,	2.6	15

1250	Polarization-dependent shift in excitonic Zeeman splitting of self-assembled In _{0.75} Al _{0.25} As/Al _{0.3} Ga _{0.7} As quantum dots. 2005 , 71,		38
1249	Dynamics and phonon-induced decoherence of Andreev level qubit. 2005 , 71,		41
1248	Phonon decoherence of a double quantum dot charge qubit. 2005 , 71,		57
1247	Entanglement observables and witnesses for interacting quantum spin systems. <i>Physical Review A</i> , 2005 , 72,	2.6	63
1246	Quantum computing via defect states in two-dimensional antidot lattices. 2005 , 5, 2515-8		20
1245	Charge decoherence in laterally coupled quantum dots due to electron-phonon interactions. 2005 , 72,		77
1244	Charge qubit dynamics in a double quantum dot coupled to phonons. 2005 , 71,		48
1243	Disorder suppression and precise conductance quantization in constrictions of PbTe quantum wells. 2005 , 72,		23
1242	Spin-orbit effects in single-electron states in coupled quantum dots. 2005 , 72,		68
1241	Entanglement distillation by adiabatic passage in coupled quantum dots. 2005 , 72,		27
1240	Spin characterization and control over the regime of radiation-induced zero-resistance states. 2005 , 4, 27-34		14
1239	Optical properties of a semiconductor quantum dot with a single magnetic impurity: photoinduced spin orientation. 2005 , 71,		92
1238	Proposal for quantum gates in permanently coupled antiferromagnetic spin rings without need of local fields. 2005 , 94, 190501		108
1237	An entangled web of crime: Bell's theorem as a short story. 2005 , 73, 932-937		6
1236	Implementing a high-efficiency quantum-controlled phase gate between long-distance atoms. 2005 , 22, 1547		5
1235	Coulomb scattering cross section in a two-dimensional electron gas and production of entangled electrons. 2005 , 71,		15
1234	Cluser-Horne inequality and decoherence in mesoscopic conductors. 2005 , 72,		8
1233	Intervalley interactions in Si quantum dots. 2005 , 98, 033709		14

1232	Study of temperature dependence of electron-phonon relaxation and dephasing in semiconductor double-dot nanostructures. 2005 , 4, 65-70	9
1231	Effect of electron-nuclear spin interactions for electron-spin qubits localized in InGaAs self-assembled quantum dots. 2005 , 97, 043706	22
1230	Tunable effective g factor in InAs nanowire quantum dots. 2005 , 72,	124
1229	Spin relaxation and anticrossing in quantum dots: Rashba versus Dresselhaus spin-orbit coupling. 2005 , 71,	118
1228	Phonon-induced decoherence for a quantum-dot spin qubit operated by Raman passage. 2005 , 71,	46
1227	Theory of ultrafast optical manipulation of electron spins in quantum wells. 2005 , 98, 123515	3
1226	Spin relaxation and decoherence of holes in quantum dots. 2005 , 95, 076805	192
1225	Gate-defined quantum dots on carbon nanotubes. 2005 , 5, 1267-71	77
1224	Optical Bistability, Optical Computing, Spintronics and Quantum Computing. 2005 , 645-673	
1223	Room-temperature threshold reduction in vertical-cavity surface-emitting lasers by injection of spin-polarized electrons. 2005 , 87, 241117	73
1222	Spin relaxation in diluted magnetic semiconductor quantum dots. 2005 , 72,	13
1221	Tunable double quantum dots in InAs nanowires defined by local gate electrodes. 2005 , 5, 1487-90	135
1220	Universal scaling of hyperfine-induced electron spin echo decay. 2005 , 71,	57
1219	Optically bright quantum dots in single Nanowires. 2005 , 5, 1439-43	241
1218	Control of vertically coupled InGaAs/GaAs quantum dots with electric fields. 2005 , 94, 157401	127
1217	Thermal entanglement of spins in an inhomogeneous magnetic field. <i>Physical Review A</i> , 2005 , 71,	2.6 112
1216	Coherence stabilization of a two-qubit gate by ac fields. 2005 , 95, 140502	34
1215	Rigorous Born approximation and beyond for the spin-boson model. 2005 , 71,	91

1214	Unavoidable decoherence in semiconductor quantum dots. 2005 , 72,		27
1213	Decoherence of localized spins interacting via RKKY interaction. 2005 , 72,		23
1212	Effect of pulsed laser action on hole-energy spectrum of GeSi self-assembled quantum dots. 2005 , 72,		22
1211	Spin-orbit coupling and anisotropy of spin splitting in quantum dots. 2005 , 94, 226404		56
1210	Level structure and spin-orbit effects in quasi-one-dimensional semiconductor nanostructures. 2005 , 71,		26
1209	Control and detection of singlet-triplet mixing in a random nuclear field. 2005 , 309, 1346-50		460
1208	Physics. Double quantum dot as a quantum bit. 2005 , 309, 2173-4		55
1207	Pseudo-spin quantum computation in semiconductor nanostructures. 2005 , 7, 177-177		2
1206	Semiconductor Few-Electron Quantum Dots as Spin Qubits. 2005 , 25-95		17
1205	Thermal entanglement in a two-qubit Heisenberg XXZ spin chain under an inhomogeneous magnetic field. <i>Physical Review A</i> , 2005 , 72,	2.6	190
1204	Quantum teleportation via a two-qubit Heisenberg XY chain—effects of anisotropy and magnetic field. 2005 , 38, 3235-3243		64
1203	Electromagnetically induced transparency in quantum dot systems. 2006 , 39, 2621-2632		11
1202	Single-exciton spectroscopy of semimagnetic quantum dots. 2006 , 73,		82
1201	Molecular routes for spin cluster qubits. 2006 , 2810-7		63
1200	Coherence of spin qubits in silicon. 2006 , 18, S783-S794		97
1199	Electronic coupling and exciton energy transfer in CdTe quantum-dot molecules. 2006 , 128, 10436-41		204
1198	Polarization-induced Rashba spin-orbit coupling in structurally symmetric III-nitride quantum wells. 2006 , 89, 222108		39
1197	Giant magnetic moment in an anomalous ferromagnetic insulator: Co-doped ZnO. 2006 , 73,		216

1196	Effect of spin-orbit interaction on the quenching of the acoustoelectric current in a quasi-one-dimensional channel. 2006 , 73,	1
1195	Effect of exchange interaction on spin dephasing in a double quantum dot. 2006 , 97, 056801	65
1194	Time-dependent single-electron transport through quantum dots. 2006 , 69, 759-796	86
1193	Electron transport through Aharonov-Bohm interferometer with laterally coupled double quantum dots. 2006 , 74,	43
1192	Correlation-induced resonances in transport through coupled quantum dots. 2006 , 96, 146801	80
1191	Geometrical spin dephasing in quantum dots. 2006 , 97, 076803	48
1190	Charge qubit entanglement in double quantum dots. 2006 , 76, 905-911	11
1189	Dynamics of coupled qubits interacting with an off-resonant cavity. 2006 , 73,	30
1188	Flux qubit on a mesoscopic nonsuperconducting ring. 2006 , 74,	32
1187	Intense terahertz laser fields on a quantum dot with Rashba spin-orbit coupling. 2006 , 100, 063709	20
1186	Photoluminescence studies of type-II diluted magnetic semiconductor ZnMnTe \bar{x} Se quantum dots. 2006 , 89, 263111	24
1185	Enhancement-mode metal-oxide-semiconductor single-electron transistor on pure silicon. 2006 , 89, 073106	8
1184	Effect of exchange interaction on the fidelity of quantum state transfer from a photon qubit to an electron-spin qubit. 2006 , 74,	2
1183	Quenching of photoluminescence in conjugates of quantum dots and single-walled carbon nanotube. 2006 , 110, 26068-74	123
1182	Bias-controllable intrinsic spin polarization in a quantum dot: Proposed scheme based on spin-orbit interaction. 2006 , 73,	115
1181	Charging characteristics of a few electron triple lateral quantum dot system in GaAs/AlGaAs. 2006 ,	
1180	Top-gate defined double quantum dots in InAs nanowires. 2006 , 89, 252106	73
1179	Decoherence of Dynamically Manipulated Qubits. 2006 ,	

1178	Manganese-induced long-range lattice disorder and vacancy formation in metal-organic chemical vapor deposition grown and ion-implanted Ga _{1-x} Mn _x N. 2006 , 24, 1640-1643	5
1177	Spin relaxation of excitons in nonmagnetic quantum dots: Effect of spin coupling to magnetic semiconductor quantum dots. 2006 , 99, 08F702	10
1176	Spin-injection dynamics in a magnetic double quantum well studied by pump-probe absorption spectroscopy. 2006 , 88, 211108	5
1175	Lasing of wavelength-tunable (1.55 μ m region) InAs/InGaAsP/InP (100) quantum dots grown by metal organic vapor-phase epitaxy. 2006 , 89, 073115	59
1174	Well-defined insulating band for electronic transport through a laterally coupled double-quantum-dot chain: Nonequilibrium Green's function calculations. 2006 , 73,	91
1173	Entanglement and Correlation in Kondo Impurity Systems. 2006 ,	
1172	Randomized dynamical decoupling techniques for coherent quantum control. 2006 , 53, 2559-2568	7
1171	Engineering quantum confinement and orbital couplings in laterally coupled vertical quantum dots for spintronic applications. 2006 , 5, 343-349	2
1170	Threshold error penalty for fault-tolerant quantum computation with nearest neighbor communication. 2006 , 5, 42-49	27
1169	Implementation of three Qubit Quantum Logic Gates in Ballistic Nanowires. 2006 ,	
1168	Mode locking of electron spin coherences in singly charged quantum dots. 2006 , 313, 341-5	349
1167	Electronic spin precession and interferometry from spin-orbital entanglement in a double quantum dot. 2006 , 97, 247207	8
1166	Spin-Based Optical Quantum Information Processing. 2006 , 46, 357-370	
1165	Entanglement control in an anisotropic two-qubit Heisenberg XYZ model with external magnetic fields. <i>Physical Review A</i> , 2006 , 74,	2.6 99
1164	Reduced decoherence in large quantum registers. 2006 , 97, 150503	53
1163	Full configuration interaction approach to the few-electron problem in artificial atoms. 2006 , 124, 124102	141
1162	Entangled photon pairs from semiconductor quantum dots. 2006 , 96, 130501	651
1161	Ultra-long-distance interaction between spin qubits. 2006 , 74,	113

1160	Transport properties of strongly correlated electrons in quantum dots studied with a simple circuit model. 2006 , 96, 066802		27
1159	Quantum dots in carbon nanotubes. 2006 , 21, S52-S63		38
1158	EVALUATION OF DECOHERENCE FOR QUANTUM COMPUTING ARCHITECTURES: QUBIT SYSTEM SUBJECT TO TIME-DEPENDENT CONTROL. 2006 , 20, 1476-1495		7
1157	Circular-to-linear and linear-to-circular conversion of optical polarization by semiconductor quantum dots. 2006 , 96, 027402		35
1156	Excited state spectroscopy in carbon nanotube double quantum dots. 2006 , 6, 1350-5		66
1155	Quantum entanglement in the two-impurity Kondo model. <i>Physical Review A</i> , 2006 , 73,	2.6	49
1154	Electric-dipole-induced spin resonance in quantum dots. 2006 , 74,		224
1153	Charge-fluctuation-induced dephasing of exchange-coupled spin qubits. 2006 , 96, 100501		142
1152	Two-spin measurements in exchange interaction quantum computers. 2006 , 73,		13
1151	Exact dynamics of a two-qubit system in a spin star environment. 2006 , 73,		74
1150	Spin qubits in double quantum dots: Entanglement versus the Kondo effect. 2006 , 74,		27
1149	Ground-state emission from a single InAs/GaAs self-assembled quantum dot structure in ultrahigh magnetic fields. 2006 , 74,		29
1148	Two interacting electrons in a one-dimensional parabolic quantum dot: exact numerical diagonalization. 2006 , 18, 2623-2633		18
1147	Conductance through an array of quantum dots. 2006 , 74,		33
1146	Valley susceptibility of an interacting two-dimensional electron system. 2006 , 97, 186404		194
1145	Quantum-information transport to multiple receivers. <i>Physical Review A</i> , 2006 , 73,	2.6	40
1144	Two-electron states and their entanglement in a double-barrier nanoring. 2006 , 73,		3
1143	Landig tensor in semiconductor nanostructures. 2006 , 97, 236402		48

1142	Pairwise decoherence in coupled spin qubit networks. 2006 , 97, 207206	86
1141	Electronic transport through a quantum-dot ring. 2006 , 73,	28
1140	Confinement-Induced versus Correlation-Induced Electron Localization and Wave Function Entanglement in Semiconductor Nano Dumbbells. 2006 , 6, 1069-1074	18
1139	Spin dephasing of doped electrons in charge-tunable InP quantum dots: Hanle-effect measurements. 2006 , 74,	15
1138	Landfactors and orbital momentum quenching in semiconductor quantum dots. 2006 , 96, 026804	160
1137	Theory of ultrafast nonlinear optics of Coulomb-coupled semiconductor quantum dots: Rabi oscillations and pump-probe spectra. 2006 , 73,	56
1136	Entanglement of two impurities through electron scattering. 2006 , 96, 230501	51
1135	Ultrafast optical control of electron spin coherence in charged GaAs quantum dots. 2006 , 74,	31
1134	Spin Exchange Oscillation of a Two-Spin System in a Semiconductor Host. 2006 , 75, 053703	2
1133	Semiconductor quantum dots take first steps toward spin-based quantum computation. 2006 , 59, 16-18	3
1132	A Short Survey On Quantum Computers. 2006 , 28, 227-233	4
1131	A scheme to implement the Deutsch-Josza algorithm on a superconducting charge-qubit quantum computer*. 2006 , 16, 594-599	5
1130	Coherent quantum dynamics of mesoscopic metallic ring with a barrier. 2006 , 30, 224-229	3
1129	Shape control of II-VI semiconductor nanomaterials. 2006 , 2, 316-29	335
1128	Magneto-optical Faraday effect in II-VI based semimagnetic semiconductor nanocrystals. 2006 , 3, 1160-1163	3
1127	Optical anisotropy of CdSe/ZnSe quantum dots. 2006 , 3, 912-915	8
1126	Single photon correlation measurements in a study of excitation process of individual CdTe/ZnTe quantum dots. 2006 , 3, 3802-3805	
1125	Electron spin coherence in singly charged (In,Ga)As/GaAs quantum dots. 2006 , 3, 3740-3743	

1124	Quantum information processing on spin degrees of freedom in QDs placed in diluted magnetic semiconductor. 2006 , 3, 3702-3706	
1123	Electron spin dynamics and hyperfine interaction in coupled quantum dots. 2006 , 3, 4392-4395	2
1122	Fidelity analysis of the photon-spin quantum state transfer. 2006 , 3, 4350-4353	
1121	Spin-sensitive differential transmission experiments in quasi-spherical CdS quantum dots. 2006 , 3, 4291-4294	4
1120	Improving the purity of one- and two-qubit gates. 2006 , 54, 804-819	6
1119	Structure, ferromagnetism and magnetotransport of epitaxial (Ga,Mn)As/GaAs structures. 2006 , 203, 3565-3573	
1118	Optical probing of spin-dependent interactions in IIIV semiconductor structures. 2006 , 243, 906-913	
1117	Inter-dot spin exchange interaction in coupled IIIV semiconductor quantum dots. 2006 , 243, 799-804	4
1116	Control and measurement of electron spins in semiconductor quantum dots. 2006 , 243, 3682-3691	7
1115	Control of single spins in individual magnetic quantum dots. 2006 , 243, 3709-3718	4
1114	Measurement, control, and decay of quantum-dot spins. 2006 , 243, 3658-3672	34
1113	Optical control of electron spin dynamics in self-assembled (In,Ga)As/GaAs quantum dots. 2006 , 243, 3719-3724	1
1112	High fidelity measurement of singlet-triplet state in a quantum dot. 2006 , 243, 3855-3858	6
1111	Spin interactions in InAs quantum dots and molecules. 2006 , 243, 3859-3863	2
1110	Theory of spin states in coupled quantum dots. 2006 , 243, 3869-3873	7
1109	Entangled photon pairs from radiative cascades in semiconductor quantum dots. 2006 , 243, 3900-3904	1
1108	Anisotropic exchange interaction induced by a few photons in semiconductor microcavities. 2006 , 243, 3885-3889	
1107	Electrical spin injection into InGa(N)As quantum structures and single InGaAs quantum dots. 2006 , 243, 3812-3824	16

1106	Quantum physics: a spin solo. 2006 , 442, 749-50	2
1105	Quantum information: long live the spin. 2006 , 5, 255-6	5
1104	Electric-dipole-induced spin resonance in disordered semiconductors. 2006 , 2, 195-199	59
1103	A coherent all-electrical interface between polar molecules and mesoscopic superconducting resonators. 2006 , 2, 636-642	343
1102	Bridge between two lengthscales. 2006 , 2, 583-584	6
1101	Connect the dots. 2006 , 2, 807-808	3
1100	Driven coherent oscillations of a single electron spin in a quantum dot. 2006 , 442, 766-71	1059
1099	Quantum teleportation in one-dimensional quantum dots system. 2006 , 421, 338-342	15
1098	Ordered inclusion of endohedral fullerenes N@C60 and P@C60 in a crystalline matrix. 2006 , 424, 327-332	32
1097	Short-time decoherence of a quantum Hadamard gate with Josephson charge qubits. 2006 , 381, 1-5	
1096	Structural and optical properties of sputtered gadolinium nitride films. 2006 , 260, 588-594	12
1095	Coherent population transfer in a chain of tunnel coupled quantum dots. 2006 , 264, 419-425	34
1094	Hanle effect measurements of spin relaxation in self-assembled CdSe quantum dots. 2006 , 32, 399-402	2
1093	Micro-photoluminescence spectroscopy of hierarchically self-assembled quantum dots. 2006 , 32, 29-32	10
1092	Enhancement of spin polarization in asymmetrically coupled CdSe and CdZnMnSe quantum dots in ZnSe matrix. 2006 , 32, 367-370	
1091	Spin relaxation and antiferromagnetic coupling in semiconductor quantum dots. 2006 , 32, 354-358	4
1090	Few-electron quantum dot fabricated with layered scanning force microscope lithography. 2006 , 32, 5-8	3
1089	Magneto optics of single photons emitted from single InAs/GaAs self-assembled quantum dots in a planar microcavity. 2006 , 32, 127-130	11

1088	Single-shot readout of electron spins in a semiconductor quantum dot. 2006 , 34, 1-5	5
1087	Tuning of tunneling rates in quantum dots using a quantum point contact. 2006 , 34, 500-503	1
1086	Single-electron transfer between double quantum dots defined by surface acoustic waves. 2006 , 34, 546-549	6
1085	Electronic structure of multiple dots. 2006 , 34, 616-619	6
1084	Quantum Hall droplets in coupled lateral quantum dots. 2006 , 34, 636-639	
1083	Phase coherence in the cotunneling regime of a coupled double quantum dot. 2006 , 34, 497-499	1
1082	Molecular states in a one-electron double quantum dot. 2006 , 34, 488-492	5
1081	Frequency-dependent Hall effect in spintronic systems under zero magnetic field. 2006 , 34, 321-324	1
1080	Electric field controlled g-factor in parabolic well determined by transport measurements. 2006 , 34, 329-332	4
1079	PbTe – a new medium for quantum ballistic devices. 2006 , 34, 560-563	14
1078	Study of the microwave-induced transport through a quantum dot inserted in a 35-GHz loop-gap resonator. 2006 , 34, 480-483	
1077	Coupled parallel quantum dots in silicon-on-insulator metal-oxide-semiconductor field-effect transistors. 2006 , 33, 273-279	1
1076	Photocurrent and spin manipulation in quantum dots. 2006 , 34, 333-335	1
1075	Fano effect in the Coulomb blockade regime for a parallel-coupled double quantum dot system. 2006 , 34, 538-541	9
1074	Linear and nonlinear intersubband optical absorption coefficients and refractive index changes in a quantum box with finite confining potential. 2006 , 33, 319-324	187
1073	Spectroscopy of molecular states in a few-electron double quantum dot. 2006 , 35, 278-284	2
1072	Electron spin coherence in Si. 2006 , 35, 257-263	21
1071	Quantum nanostructures of paraelectric PbTe. 2006 , 35, 332-337	8

1070	Optical properties of individual manganese-doped quantum dots. 2006 , 35, 300-308	1
1069	Optical generation of spin coherence in single-charged (In,Ga)As/GaAs self-assembled quantum dots. 2006 , 35, 272-277	
1068	Carbon nanotubes as building blocks of quantum dots. 2006 , 35, 338-343	5
1067	Spin diffusion and relaxation in solid state spin quantum computer. 2006 , 352, 107-114	
1066	Scheme for generating maximally entangled atomic states in a spinor Bose-Einstein condensate. 2006 , 354, 151-155	2
1065	Influence of intrinsic decoherence on quantum teleportation via two-qubit Heisenberg XYZ chain. 2006 , 354, 79-83	31
1064	Coupling bosonic modes with a qubit: entanglement dynamics at zero and finite temperatures. 2006 , 360, 49-56	10
1063	Highly sensitive time-resolved Kerr rotation measurements on single-layer quantum dots. 2006 , 119-120, 178-182	3
1062	Wavelength controlled InAs/InP quantum dots for telecom laser applications. 2006 , 37, 1461-1467	6
1061	Adiabatic passage schemes in coupled semiconductor nanostructures. 2006 , 264, 426-434	21
1060	Entanglement in a spin-one spin chain. 2006 , 138, 17-21	13
1059	Spin relaxation in charged quantum dots measured by coherent optical phase modulation spectroscopy. 2006 , 140, 381-385	10
1058	A direct measurement of the trion relaxation and dipole decoherence rate: An application of high resolution coherent nonlinear optical spectroscopy. 2006 , 140, 374-377	1
1057	Initial stage of the two-dimensional to three-dimensional transition of a strained SiGe layer on a pit-patterned Si(001) template. 2006 , 74,	65
1056	Josephson effect in junctions of ferromagnetic superconductors with equal spin pairing symmetry. 2006 , 73,	22
1055	Semiconductor quantum dots for electron spin qubits. 2006 , 8, 28-28	27
1054	Spintronic devices as quantum networks. 2006 , 16, 1444-1450	1
1053	Quantum computation based on a quantum switch in cavity QED. 2006 , 16, 1508-1511	2

1052	Cold atoms in optical lattices as qubits for a quantum computer. 2006 , 35, 74-77	3
1051	Optical absorption and scattering at one-particle states of charge carriers in semiconductor quantum dots. 2006 , 40, 217-223	18
1050	Spin excitations in few-electrons AlGaAs/GaAs quantum dots probed by inelastic light scattering. 2006 , 34, 304-307	3
1049	Asymmetric quantum dots in an applied electric field: discontinuous electron density. 2006 , 49, 25-35	1
1048	Individual charge traps in silicon nanowires. 2006 , 54, 299-307	54
1047	Thermal entanglement in a two-spin-qutrit system under a nonuniform external magnetic field. 2006 , 37, 123-127	23
1046	Design of Q-band loop-gap resonators at frequencies of 34.6 GHz for single electron spin spectroscopy in semiconductor nanostructures. 2006 , 77, 064702	17
1045	Quantum Malware. 2006 , 5, 69-81	1
1044	Dephasing of Quantum Bits by a Quasi-Static Mesoscopic Environment. 2006 , 5, 503-536	23
1043	Squeezed Number Eigenstate of XYZ Heisenberg Antiferromagnetics Under a Magnetic Field. 2006 , 45, 2377-2387	1
1042	The seminal literature of nanotechnology research. 2006 , 8, 193-213	60
1041	Development of Scanning Near-Field Optical Microscope Working under Cryogenic Temperature and Strong Magnetic Field. 2006 , 13, 279-282	2
1040	Electron-Nuclear double resonance and dynamic nuclear polarization in GaAs in the regime of the quantum Hall effect. 2006 , 373, 182-193	3
1039	Design and fabrication of a SiGe double quantum well structure for g-factor tuning. 2006 , 39, 414-420	5
1038	Site-controlled quantum dots fabricated using an atomic-force microscope assisted technique. 2006 , 1, 160-166	17
1037	New scheme of spin qubits driven by ac electric field. 2006 ,	
1036	Engineering Exchange Interaction in Coupled Elongated Quantum Dots. 2006 ,	
1035	Orbital quantum bit in Si quantum dots. 2006 ,	

1034	Few-body spin couplings and their implications for universal quantum computation. 2006 , 18, S721-S744	9
1033	Global optical control of a quantum spin chain. 2006 , 8, 69-69	8
1032	Magnetic field influence on spectrum rearrangement and spin transformation of coupled quantum dots. 2006 , 18, S2169-S2174	2
1031	Time dependent quantum simulations of two-qubit gates based on donor states in silicon. 2006 , 18, S767-S776	5
1030	Residual Kondo effect in quantum dot coupled to half-metallic ferromagnets. 2006 , 18, 6923-6936	1
1029	Spin-polarized hole transport through a diluted magnetic semiconductor heterostructure with magnetic-field modulations. 2006 , 73, 786-792	9
1028	PARTICLE STATISTICS: A RESOURCE FOR QUANTUM INFORMATION PROCESSING. 2006 , 02, 61-70	0
1027	Stability of Decoherence-Free Subspaces under Stochastic Phase Fluctuations. 2006 , 46, 447-452	
1026	Precision characterization of two-qubit Hamiltonians via entanglement mapping. 2006 , 39, 14649-14658	15
1025	Entanglement Distillation for Mixed States Using Particle Statistics. 2006 , 23, 772-774	2
1024	Spin-Flip Process through Double Quantum Dots Coupled to Ferromagnetic Leads. 2006 , 23, 1888-1891	2
1023	Liquid Nuclear Magnetic Resonance Implementation of Quantum Computation in Subspace. 2006 , 23, 1996-1999	6
1022	Information, computing technology, and quantum computing. 2006 , 18, S703-S719	6
1021	Group IV solid state proposals for quantum computation. 2006 , 18, S745-S766	13
1020	Defining and controlling double quantum dots in single-walled carbon nanotubes. 2006 , 21, S64-S68	10
1019	Non-Classical Light from Artificial Atoms. 2006 , 53, 1-32	1
1018	Single Qubit and Its Universal Logic Gate Made of a Heisenberg Spin Cluster with Five Particles. 2006 , 23, 3131-3134	1
1017	Entanglement between static and flying qubits in quantum wires. 2006 , 74, 764-770	27

1016	Architectural implications of quantum computing technologies. 2006 , 2, 31-63	58
1015	Entanglement evolution in the presence of decoherence. 2006 , 39, 4343-4353	56
1014	Fano effect through parallel-coupled double Coulomb islands. 2006 , 18, 8961-8972	37
1013	Quantum control of two interacting electrons in a coupled quantum dot. 2006 , 15, 2130-2141	4
1012	QUANTUM COMPUTER: HOW FEASIBLE IS THE IDEA?. 2006 , 02, 101-110	
1011	ENTANGLEMENT AND QUANTUM PHASE TRANSITION IN A ONE-DIMENSIONAL SYSTEM OF QUANTUM DOTS WITH DISORDER. 2006 , 04, 827-835	4
1010	Polarization transfer from photon to nuclear spin through electron spin with zero g-factor quantum well. 2006 ,	
1009	Quantum photonics and quantum transport approach for realizing photon-spin quantum state transfer device. 2006 ,	
1008	Theory of electric dipole spin resonance in a parabolic quantum well. 2006 , 73,	28
1007	Multiple transitions of the spin configuration in quantum dots. 2006 , 97, 176801	13
1006	Spin relaxation rates in quasi-one-dimensional coupled quantum dots. 2006 , 74,	12
1005	Mesoscopic resonating valence bond system on a triple dot. 2006 , 96, 106803	9
1004	All-electrical control of single ion spins in a semiconductor. 2006 , 97, 106803	38
1003	Spin relaxation mechanism of strain-induced GaAs quantum dots studied by time-resolved Kerr rotation. 2006 , 73,	7
1002	Giant anisotropy of Zeeman splitting of quantum confined acceptors in Si/Ge. 2006 , 96, 086403	17
1001	Nuclear spin effect in a metallic spin valve. 2006 , 97, 146602	1
1000	Signatures of quantum behavior in single-qubit weak measurements. 2006 , 96, 200404	57
999	Transport through a double quantum dot weakly coupled to Luttinger liquid leads at finite applied bias voltages. 2006 , 73,	2

998	Si-based Coulomb blockade device for spin qubit logic gate. 2006 , 89, 023111	10
997	Spin-orbit mediated control of spin qubits. 2006 , 97, 240501	115
996	Spin relaxation in a GaAs quantum dot embedded inside a suspended phonon cavity. 2006 , 73,	7
995	Spin relaxation in lateral quantum dots: Effects of spin-orbit interaction. 2006 , 73,	54
994	Exciton spin relaxation in quantum dots measured using ultrafast transient polarization grating spectroscopy. 2006 , 73,	60
993	Detection and measurement of the Dzyaloshinskii-Moriya interaction in double quantum dot systems. 2006 , 73,	29
992	Analytical solution of electron spin decoherence through hyperfine interaction in a quantum dot. 2006 , 73,	92
991	Excitation spectrum of two correlated electrons in a lateral quantum dot with negligible Zeeman splitting. 2006 , 96, 126806	75
990	Spin-polarized transport in one-dimensional waveguide structures with spatially periodic electric fields. 2006 , 99, 043701	16
989	Conductance quantization in etched SiBiGe quantum point contacts. 2006 , 74,	17
988	Quantum-dot nanodevices with carbon nanotubes. 2006 , 24, 1349-1355	26
987	Magnetic-field-assisted manipulation and entanglement of Si spin qubits. 2006 , 74,	7
986	Circular dichroism in InAsGaAs quantum dots: Confinement-induced magnetism. 2006 , 74,	2
985	Effect of the triplet state on the random telegraph signal in Si n-MOSFETs. 2006 , 74,	18
984	Functional renormalization group approach to transport through correlated quantum dots. 2006 , 73,	87
983	No temperature dependence of spin relaxation in InGaN phase-separated quantum dots. 2006 , 88, 083101	13
982	Observation of one-electron charge in an enhancement-mode InAs single-electron transistor at 4.2K. 2006 , 88, 192102	4
981	Quantum dots and etch-induced depletion of a silicon two-dimensional electron gas. 2006 , 99, 023509	12

980	Ultrafast spectral hole burning spectroscopy of exciton spin flip processes in InAs/GaAs quantum dots. 2006 , 88, 192105		7
979	Coherent dynamics of locally interacting spins in self-assembled Cd _{1-x} MnxSe _z nSe quantum dots. 2006 , 73,		15
978	Electron spin dynamics in self-assembled quantum dots. 2006 ,		
977	Kondo effect in a one-electron double quantum dot: Oscillations of the Kondo current in a weak magnetic field. 2006 , 74,		13
976	RKKY interaction between quantum dot spins tuned by the quantum dot level. 2006 , 74,		7
975	Coulomb localization and exchange modulation in two-electron coupled quantum dots. 2006 , 74,		15
974	Role of defects in transport through a quantum dot single electron transistor. 2006 , 99, 124503		3
973	Magnetic susceptibility of exchange-disordered antiferromagnetic finite chains. 2006 , 73,		3
972	Global entanglement in XXZ chains. <i>Physical Review A</i> , 2006 , 73,	2.6	38
971	Coherent control of tunnelling dynamics in functionalized semiconductor nanostructures: a quantum-control scenario based on stochastic unitary pulses. 2006 , 53, 2519-2532		13
970	Charge and spin storage in self-organized quantum dots. 2006 , 88, 182107		4
969	Single wall carbon nanotube double quantum dot. 2006 , 89, 232113		23
968	Finite-element analysis of a silicon-based double quantum dot structure. 2006 , 73,		3
967	Electric-field driven donor-based charge qubits in semiconductors. 2006 , 73,		33
966	Ion implanted Si:P double dot with gate tunable interdot coupling. 2006 , 100, 106104		16
965	Sign reversal and light controlled tuning of circular polarization in semimagnetic CdMnSe quantum dots. 2006 , 100, 123109		18
964	Spin-polarized transport in a lateral two-dimensional diluted magnetic semiconductor electron gas. 2006 , 88, 082107		5
963	Design and control of spin gates in two quantum-dot arrays. 2006 , 88, 103103		5

962	Quantum logic processor: Implementation with electronic Mach-Zehnder interferometer. 2006 , 88, 213113	7
961	Control of the supercurrent through a parallel-coupled double quantum dot system. 2006 , 74,	22
960	Scheme for direct measurement of a general two-qubit Hamiltonian. <i>Physical Review A</i> , 2006 , 73,	2.6 30
959	Decoherence and dephasing in Kondo tunneling through double quantum dots. 2006 , 74,	6
958	Anomalous in-plane magneto-optical anisotropy of self-assembled quantum dots. 2006 , 74,	8
957	Quantum theory for electron spin decoherence induced by nuclear spin dynamics in semiconductor quantum computer architectures: Spectral diffusion of localized electron spins in the nuclear solid-state environment. 2006 , 74,	182
956	Two-spin entanglement induced by electron scattering in nanostructures. 2006 , 74,	18
955	Spin charging sequences in three colinear laterally coupled vertical quantum dots. 2006 , 74,	11
954	Numerical method for determination of the NMR frequency of the single-qubit operation in a silicon-based solid-state quantum computer. 2006 , 74,	9
953	Long-lived memory for electronic spin in a quantum dot: Numerical analysis. 2006 , 73,	17
952	Transport properties of ferromagnetic GaMnAs interfaced with paramagnetic ZnMnSe in the form of bilayer structures. 2006 , 99, 08D512	1
951	Exchange interaction and stability diagram of coupled quantum dots in magnetic fields. 2006 , 74,	17
950	Quantum dot potentials: Symanzik scaling, resurgent expansions, and quantum dynamics. 2006 , 74,	5
949	Switching the sign of photon-induced exchange interactions in semiconductor microcavities with finite quality factors. 2006 , 74,	2
948	Stray-field-induced modification of coherent spin dynamics. 2006 , 88, 172501	20
947	Gate tunability of stray-field-induced electron spin precession in a GaAs $_{1-x}$ Ga x As quantum well below an interdigitated magnetized Fe grating. 2006 , 74,	9
946	Numerical simulations of a ballistic spin interferometer with Rashba spin-orbital interaction. 2006 , 74,	12
945	Spin decay in a quantum dot coupled to a quantum point contact. 2006 , 73,	34

944	Single-electron transistors in GaN/AlGaIn heterostructures. 2006 , 89, 033104		16
943	Theory of phonon-induced spin relaxation in laterally coupled quantum dots. 2006 , 96, 186602		97
942	Phase coherence in the inelastic cotunneling regime. 2006 , 96, 036804		58
941	Decoherence in large NMR quantum registers. <i>Physical Review A</i> , 2006 , 74,	2.6	29
940	Spin-based quantum computing using electrons on liquid helium. <i>Physical Review A</i> , 2006 , 74,	2.6	64
939	Local operations in qubit arrays via global periodic manipulation. <i>Physical Review A</i> , 2006 , 74,	2.6	10
938	Einstein-Podolsky-Rosen-Bohm correlation in photoelectron Auger-electron coincidence spectroscopy of atoms. <i>Physical Review A</i> , 2006 , 74,	2.6	14
937	Protocol for quantum-logical operations in an optical lattice using nonresonant absorption of photon pairs. <i>Physical Review A</i> , 2006 , 74,	2.6	
936	Quantum measurement of a mesoscopic spin ensemble. <i>Physical Review A</i> , 2006 , 74,	2.6	64
935	Decoherence effects on the quantum spin channels. <i>Physical Review A</i> , 2006 , 74,	2.6	56
934	Spin decoherence from Hamiltonian dynamics in quantum dots. <i>Physical Review A</i> , 2006 , 74,	2.6	15
933	Kondo quantum dots and the novel Kondo-doublet interaction. 2006 , 97, 266804		20
932	Tunneling magnetoresistance of MnAs thin film/GaAs/AlAs/GaAs:MnAs nanoclusters and its AlAs barrier thickness dependence. 2006 , 89, 242106		21
931	Predicted ultrafast single-qubit operations in semiconductor quantum dots. 2006 , 88, 233108		25
930	Optical manipulation of single electron spin in doped and undoped quantum dots. 2006 , 89, 041112		
929	Continuous measurement of a microwave-driven solid state qubit. 2006 , 96, 017405		29
928	An electron counting modification to potentials for covalently bonded surfaces. 2006 , 99, 064908		2
927	Enhancement of electron spin coherence by optical preparation of nuclear spins. 2006 , 96, 136401		118

926	Enhanced convergence and robust performance of randomized dynamical decoupling. 2006 , 97, 150501	41
925	Two color plasmon excitation in an electron-hole bilayer structure controlled by the spin-orbit interaction. 2006 , 88, 223102	11
924	Coherent single electron spin control in a slanting Zeeman field. 2006 , 96, 047202	178
923	Stability diagram of a few-electron triple dot. 2006 , 97, 036807	205
922	Electrically tunable g factors in quantum dot molecular spin states. 2006 , 97, 197202	92
921	Optical control of spin coherence in singly charged (In,Ga)As/GaAs quantum dots. 2006 , 96, 227401	176
920	Qubit entanglement in multimagnon states. 2006 , 73,	4
919	Millisecond spin-flip times of donor-bound electrons in GaAs. 2006 , 74,	22
918	Theory of a two-level artificial molecule in laterally coupled quantum Hall droplets. 2006 , 73,	8
917	Dimensionality effects in the two-electron system in circular and elliptic quantum dots. 2006 , 73,	16
916	Effects of electron-electron interaction and electron spin correlations on the exchange coupling in mesoscopic rings. 2006 , 73,	5
915	Control of spin relaxation in semiconductor double quantum dots. 2006 , 74,	14
914	Observation of low-lying excitations of electrons in coupled quantum dots. 2006 , 88, 113105	4
913	Exchange coupling in semiconductor nanostructures: Validity and limitations of the Heitler-London approach. 2006 , 74,	12
912	Nuclear spin state narrowing via gate-controlled Rabi oscillations in a double quantum dot. 2006 , 73,	139
911	Hyperfine interaction induced decoherence of electron spins in quantum dots. 2006 , 74,	65
910	Optimal generation of single-qubit operation from an always-on interaction by algebraic decoupling. <i>Physical Review A</i> , 2006 , 73,	2.6 3
909	Generation of multipartite entangled states in Josephson architectures. 2006 , 74,	22

908	Spin conversion rates due to dipolar interactions in monoisotopic quantum dots at vanishing spin-orbit coupling. 2006 , 73,		
907	Single-particle state mixing in two-electron double quantum dots. 2006 , 73,		20
906	Magnetic-field-dependent type-II transition induced by resonant electron tunneling from a diluted magnetic semiconductor quantum well into self-assembled quantum dots. 2006 , 100, 084327		3
905	Quantum entanglement generation with surface acoustic waves. 2006 , 74,		19
904	Effect of inelastic scattering on spin entanglement detection through current noise. 2006 , 74,		13
903	Quantum computation using controllable exchange interactions and a global magnetic field. <i>Physical Review A</i> , 2006 , 73,	2.6	2
902	Spin-bus concept of spin quantum computing. <i>Physical Review A</i> , 2006 , 73,	2.6	44
901	Rabi oscillations in the four-level double-dot structure under the influence of the resonant pulse. 2006 , 73,		36
900	Fault-tolerant quantum computing with coded spins using the conditional Faraday rotation in quantum dots. 2006 , 73,		22
899	Optimal quantum gates for semiconductor qubits. 2006 , 74,		33
898	Quantum theory of light emission from a semiconductor quantum dot. 2006 , 73,		43
897	Orbital and spin relaxation in single and coupled quantum dots. 2006 , 74,		59
896	A double gate metal-oxide-semiconductor structure for modulation of the hyperfine interaction in phosphorous-doped Si device. 2006 , 100, 126106		2
895	Thermal entanglement of spins in mean-field clusters. <i>Physical Review A</i> , 2006 , 73,	2.6	12
894	Alloying of self-organized semiconductor 3D islands. 2006 , 1, 279-305		24
893	QUANTUM DOT COMPUTING GATES. 2006 , 04, 233-296		3
892	CHIRPED PULSES, GAUSS SUMS AND THE FACTORIZATION OF NUMBERS. 2006 , 20, 1893-1916		15
891	Entanglement of a two-qubit system with anisotropic couplings in nonuniform magnetic fields. 2006 , 39, 10523-10535		19

890	THEORY OF ELECTRON SPECTROSCOPIES IN STRONGLY CORRELATED SEMICONDUCTOR QUANTUM DOTS. 2006 , 20, 5311-5320	1
889	Nanometre-scale nuclear-spin device for quantum information processing. 2006 , 18, S885-S900	21
888	Entangled photon pairs from radiative cascades in semiconductor quantum dots. 2006 ,	
887	Quantum computation and quantum information View all notes . 2006 , 21, 1-59	12
886	The role of self-purification and the electronic structure of magnetically doped semiconductor nanocrystals. 2006 , 79, 739-753	4
885	Real space Hartree-Fock configuration interaction method for complex lateral quantum dot molecules. 2006 , 125, 34707	13
884	Controlling spin in an electronic interferometer with spin-active interfaces. 2006 , 74, 320-326	28
883	QUANTUM DOTS BASED ON PARABOLIC QUANTUM WELLS: IMPORTANCE OF ELECTRONIC CORRELATIONS. 2007 , 21, 1316-1325	6
882	Quantum impurity entanglement. 2007 , 2007, P08003-P08003	46
881	QUANTUM NON-DEMOLITION BELL-STATE MEASUREMENT AND n-PARTY GHZ STATE PREPARATION IN QUANTUM DOT. 2007 , 21, 867-874	3
880	PUMPING CURRENT IN A QUANTUM DOT BY AN OSCILLATING MAGNETIC FIELD. 2007 , 21, 4284-4288	2
879	Control of electron spin decoherence caused by electron-nuclear spin dynamics in a quantum dot. 2007 , 9, 226-226	84
878	Spin decoherence and relaxation processes in zero-dimensional semiconductor nanostructures. 2007 , 19, 445007	18
877	Nuclei-induced frequency focusing of electron spin coherence. 2007 , 317, 1896-9	187
876	Decoherence and entanglement evolution of two qubits coupled through Heisenberg interactions to a spin bath in thermal equilibrium. 2007 , 40, 11569-11591	9
875	Toward all semiconductor quantum repeaters. 2007 ,	
874	Electron Fabry-Perot interferometer with two entangled magnetic impurities. 2007 , 40, 7993-8008	31
873	Entanglement and its dynamics in open, dissipative systems. 2007 , 9, 230-230	18

872	Interference effects in a double quantum dot system with inter-dot Coulomb correlations. 2007 , 19, 176202	18
871	Thermal entanglement of a three-qubit system in inhomogeneous magnetic fields. 2007 , 40, 7283-7296	7
870	Cr-Doped InAs Self-Organized Diluted Magnetic Quantum Dots with Room-Temperature Ferromagnetism. 2007 , 24, 2118-2121	18
869	Exact diagonalization for spin-1/2 chains and the first order quantum phase transitions of the XXX chain in a uniform transverse field. 2007 , 19, 386208	1
868	Effects of Inhomogeneous Spin Coupling and Anisotropy on Thermal Entanglement. 2007 , 24, 1448-1451	1
867	Conductance of a double quantum dot system in the Kondo regime in the presence of inter-dot coupling and channel mixing effects. 2007 , 19, 256205	6
866	Spin quantum beats of bright and dark excitonic states in neutral InAs quantum dots. 2007 , 19, 346221	
865	Interference through quantum dots. 2007 , 9, 113-113	18
864	Optimal control of quantum gates and suppression of decoherence in a system of interacting two-level particles. 2007 , 40, S103-S125	84
863	Mutual information and swap operation in the two-qubit Heisenberg model with Dzyaloshinskii-Moriya anisotropic antisymmetric interaction. 2007 , 19, 456205	14
862	Repeat-until-success entanglement of distant atoms via single photon interference. 2007 , 40, 801-806	4
861	Suppression of spin-splitting in Al _{0.33} Ga _{0.67} As/AlyGa _{1-y} As heterostructures with y varying from 0.10 to 0.15. 2007 , 22, 722-727	1
860	Tunable few-electron quantum dots in InAs nanowires. 2007 , 18, 044014	29
859	Resonant scattering can enhance the degree of entanglement. 2007 , 40, 297-308	37
858	Compensation of the Kondo effect in quantum dots coupled to ferromagnetic leads within the equation of motion approach. 2007 , 19, 346234	11
857	Spin-polarized transport in a coupled-double-quantum-dot system with ferromagnetic electrodes. 2007 , 19, 376215	5
856	General quantum phase estimation and calibration of a timepiece in a quantum dot system. 2007 , 19, 376216	4
855	Phase-dependent characteristics of a superconducting junction by using the Schrödinger wave function. 2007 , 76, 634-640	5

854	Universal dephasing control during quantum computation. <i>Physical Review A</i> , 2007 , 76,	2.6	23
853	Violation of Bell's inequality for two coupled quantum dots confined in a cavity. 2007 , 75,		6
852	Nuclear-spin effects in singly negatively charged InP quantum dots. 2007 , 75,		27
851	Description of thermal entanglement with the static path plus random-phase approximation. <i>Physical Review A</i> , 2007 , 76,	2.6	14
850	Bell-state preparation for electron spins in a semiconductor double quantum dot. 2007 , 76,		8
849	Spin fine structure of optically excited quantum dot molecules. 2007 , 75,		63
848	Micromagnets for coherent control of spin-charge qubit in lateral quantum dots. 2007 , 90, 024105		39
847	Parametric spin excitations in lateral quantum dots. 2007 , 76,		9
846	External field control of donor electron exchange at the Si/SiO ₂ interface. 2007 , 75,		39
845	Nonthermal broadening in the conductance of double quantum dot structures. 2007 , 76,		18
844	Coulomb blockade and Kondo effect in a few-electron silicon/silicon-germanium quantum dot. 2007 , 90, 033103		32
843	Exact dynamics in the inhomogeneous central-spin model. 2007 , 76,		77
842	Decoherence in large quantum registers under variable interaction with the environment. <i>Physical Review A</i> , 2007 , 75,	2.6	51
841	Theory of anisotropic spin relaxation in quantum dots. 2007 , 75,		18
840	Formation of multipartite entanglement using random quantum gates. <i>Physical Review A</i> , 2007 , 76,	2.6	11
839	Strongly bias-dependent spin injection from Fe into n-type GaAs. 2007 , 75,		9
838	Spin relaxation in a generic two-dimensional spin-orbit coupled system. 2007 , 75,		64
837	Linear combination of harmonic orbitals and configuration interaction method for the voltage control of exchange interaction in gated lateral quantum dot networks. 2007 , 76,		23

836	Tunneling and optical control in quantum ring molecules. 2007 , 76,		37
835	Matrix realignment and partial-transpose approach to entangling power of quantum evolutions. <i>Physical Review A</i> , 2007 , 75,	2.6	22
834	Interdot coupling in a Si-based coupled double dot system for spin qubit gate. 2007 , 91, 053114		9
833	Decoherence of two-electron spin states in quantum dots. <i>Physical Review A</i> , 2007 , 75,	2.6	7
832	Effective quantum dynamics of interacting systems with inhomogeneous coupling. <i>Physical Review A</i> , 2007 , 75,	2.6	18
831	Faraday-rotation fluctuation spectroscopy with static and oscillating magnetic fields. 2007 , 75,		25
830	Optical transitions between valley split subbands in biased Si quantum wells. 2007 , 75,		11
829	Optimized stray-field-induced enhancement of the electron spin precession by buried Fe gates. 2007 , 91, 162507		2
828	Circuit analysis of quantum measurement. <i>Physical Review A</i> , 2007 , 75,	2.6	1
827	Effective interactions, large-scale diagonalization, and one-dimensional quantum dots. 2007 , 76,		14
826	Pulse-induced acoustoelectric vibrations in surface-gated GaAs-based quantum devices. 2007 , 75,		5
825	Electron transport through a silicon-germanium double quantum dot at 40mK. 2007 , 101, 013701		2
824	Quantum ballistic phenomena in nanostructures of paraelectric PbTe. 2007 , 101, 081722		17
823	Witnessing macroscopic entanglement in a staggered magnetic field. <i>Physical Review A</i> , 2007 , 76,	2.6	14
822	Fractional revivals of the quantum state in a tight-binding chain. <i>Physical Review A</i> , 2007 , 75,	2.6	12
821	Failure of standard approximations of the exchange coupling in nanostructures. 2007 , 76,		29
820	Electrostatically defined serial triple quantum dot charged with few electrons. 2007 , 76,		150
819	Restoring coherence lost to a slow interacting mesoscopic spin bath. 2007 , 98, 077602		129

818	Hyperfine-mediated gate-driven electron spin resonance. 2007 , 99, 246601		159
817	Admittance spectroscopy of GeSi-based quantum dot systems: Experiment and theory. 2007 , 76,		1
816	Coherent manipulation of electron spins up to ambient temperatures in Cr ⁵⁺ (S = 1/2) doped K ₃ NbO ₈ . 2007 , 99, 137601		33
815	Suppression of electron-phonon scattering in double-quantum-dot based-quantum gates. 2007 , 90, 093507		6
814	Anomalous magnetic field dependence of the T ₁ spin lifetime in a lightly doped GaAs sample. 2007 , 75,		14
813	Production of multipartite entanglement for electron spins in quantum dots. <i>Physical Review A</i> , 2007 , 76,	2.6	14
812	Topological Hund's rules and the electronic properties of a triple lateral quantum dot molecule. 2007 , 75,		94
811	Quantum computation and Bell-state measurements with double-dot molecules. <i>Physical Review A</i> , 2007 , 76,	2.6	16
810	Universal set of quantum gates for double-dot spin qubits with fixed interdot coupling. 2007 , 98, 050502		109
809	Light-emission properties of quantum dots embedded in a photonic double-heterostructure nanocavity. 2007 , 90, 231101		25
808	Quantum simulator for the Hubbard model with long-range Coulomb interactions using surface acoustic waves. 2007 , 99, 016405		19
807	Quantum computation in semiconductor quantum dots of electron-spin asymmetric anisotropic exchange. <i>Physical Review A</i> , 2007 , 76,	2.6	10
806	Carrier-carrier entanglement and transport resonances in semiconductor quantum dots. 2007 , 76,		16
805	Collapse of nonequilibrium charge states in an isolated quantum dot using surface acoustic waves. 2007 , 75,		4
804	Spin-state mixing in InAs double quantum dots. 2007 , 76,		57
803	Theory of spin, electronic, and transport properties of the lateral triple quantum dot molecule in a magnetic field. 2007 , 76,		49
802	Controlled dynamics of qubits in the presence of decoherence. <i>Physical Review A</i> , 2007 , 76,	2.6	14
801	SWAP operation in the two-qubit Heisenberg XXZ model: Effects of anisotropy and magnetic field. <i>Physical Review A</i> , 2007 , 75,	2.6	12

800	Universal quantum computing with correlated spin-charge states. 2007 , 75,		13
799	Robust controlled-NOT gate in the presence of large fabrication-induced variations of the exchange interaction strength. <i>Physical Review A</i> , 2007 , 76,	2.6	22
798	Quantum communication with quantum dot spins. 2007 , 75,		32
797	Measuring complete quantum states with a single observable. <i>Physical Review A</i> , 2007 , 76,	2.6	8
796	Time evolution and decoherence of a spin-1/2 particle coupled to a spin bath in thermal equilibrium. 2007 , 76,		40
795	Spin-polarized transport through weakly coupled double quantum dots in the Coulomb-blockade regime. 2007 , 75,		14
794	Quantum logic via the exchange blockade in ultracold collisions. 2007 , 98, 070501		80
793	Entanglement generation via power-of-swap operations between dynamic electron-spin qubits. <i>Physical Review A</i> , 2020 , 101,	2.6	3
792	Spin vortices and skyrmions of a single electron in inhomogeneous magnetic fields. 2020 , 101,		3
791	Resonantly Driven Singlet-Triplet Spin Qubit in Silicon. 2020 , 124, 117701		23
790	The ubiquitous nature of chalcogenides in science and technology. 2020 , 1-30		0
789	Quantum computational chemistry. 2020 , 92,		256
788	Charge noise induced spin dephasing in a nanowire double quantum dot with spin-orbit coupling. 2020 , 32, 025305		0
787	Autotuning of double dot devices with machine learning. 2020 , 13,		16
786	A generalised approach to calculate various transport observables for a linear array of series and parallel quantum dots. 2020 , 94, 1		0
785	Entangling Two Macroscopic Mechanical Resonators at High Temperature. 2020 , 13,		11
784	Adiabatic electron charge transfer between two quantum dots in presence of 1/f noise. 2020 , 101,		6
783	Effect of spin-orbit interactions on the energy, magnetic moment and susceptibility of an off-center donor impurity in a Gaussian quantum dot. 2020 ,		

782	Micromotion-enhanced fast entangling gates for trapped-ion quantum computing. <i>Physical Review A</i> , 2020 , 101,	2.6	2
781	Efficient unitary method for simulation of driven quantum dot systems. 2020 , 4, 055004		
780	Effects of glutathione on the luminescent behavior of CdSe-nanocrystals. 2020 , 226, 117513		2
779	Solid-State Qubits: 3D Integration and Packaging. 2020 , 21, 72-85		15
778	Coherent Multispin Exchange Coupling in a Quantum-Dot Spin Chain. 2020 , 10,		8
777	Non-polar nitride single-photon sources. 2020 , 22, 073001		1
776	Lindblad evolution and quantum to classical transition of Rabi oscillation in single quantum dot. 2020 ,		
775	Thermal Entanglement and Correlated Coherence in Two Coupled Double Quantum Dots Systems. 2020 , 532, 2000207		6
774	Tuning spatial entanglement in interacting two-electron quantum dots. 2020 , 101,		2
773	Coherent Conversion Between Microwave and Optical Photons—An Overview of Physical Implementations. 2020 , 3, 1900077		62
772	Relaxation dynamics in double-spin systems. 2020 , 101,		1
771	Preparing Multipartite Entangled Spin Qubits via Pauli Spin Blockade. 2020 , 10, 3481		9
770	Spin decoherence in inhomogeneous media. 2020 , 22, 033017		
769	Geometric phase of an open double-quantum-dot system detected by a quantum point contact. 2020 , 29, 030302		1
768	Double quantum-dot engine fueled by entanglement between electron spins. 2020 , 101,		4
767	Single-Electron Double Quantum Dots in Bilayer Graphene. 2020 , 20, 2005-2011		25
766	Quantum dot arrays in silicon and germanium. 2020 , 116, 080501		39
765	Magnetism and spintronics in carbon nanoparticle/fullerene. 2020 , 183-199		

764	An Efficient Test Set Construction Scheme for Multiple Missing-Gate Faults in Reversible Circuits. 2020 , 36, 105-122		2
763	Fast two-qubit logic with holes in germanium. 2020 , 577, 487-491		84
762	Numerical solution of the Schrödinger equation in polar coordinates using the finite-difference time-domain method. 2020 , 19, 91-102		3
761	Nonlinear drift ion acoustic waves in degenerate plasmas with adiabatic trapping. 2020 , 95, 045609		1
760	Radio-Frequency-Detected Fast Charge Sensing in Undoped Silicon Quantum Dots. 2020 , 20, 947-952		15
759	The fundamental aspects of spintronics. 2020 , 1-21		1
758	Superconductor-semiconductor hybrid-circuit quantum electrodynamics. 2020 , 2, 129-140		49
757	Real-time simulation of flux qubits used for quantum annealing. <i>Physical Review A</i> , 2020 , 101,	2.6	3
756	Complete state tomography of a quantum dot spin qubit. 2020 , 101,		1
755	Tuning single-electron charging and interactions between compressible Landau level islands in graphene. 2020 , 101,		10
754	On the design of molecular excitonic circuits for quantum computing: the universal quantum gates. 2020 , 22, 3048-3057		11
753	High-fidelity geometric gate for silicon-based spin qubits. <i>Physical Review A</i> , 2020 , 101,	2.6	10
752	Lifting of spin blockade by charged impurities in Si-MOS double quantum dot devices. 2020 , 101,		0
751	Energy Consumption, Conversion, and Transfer in Nanometric Field-Effect Transistors (FET) Used in Readout Electronics at Cryogenic Temperatures. 2020 , 199, 171-181		0
750	Is all-electrical silicon quantum computing feasible in the long term?. 2020 , 384, 126352		12
749	Rescaling Interactions for Quantum Control. 2020 , 13,		1
748	Control of a spin qubit in a lateral GaAs quantum dot based on symmetry of gating potential. 2020 , 101,		4
747	Quantum Dots in an InSb Two-Dimensional Electron Gas. 2020 , 13,		5

746	1.3 Future Scaling: Where Systems and Technology Meet. 2020 ,	5
745	Universal quantum logic in hot silicon qubits. 2020 , 580, 355-359	92
744	Operation of a silicon quantum processor unit cell above one kelvin. 2020 , 580, 350-354	93
743	Enhancing electrostatic coupling in silicon quantum dot array by dual gate oxide thickness for large-scale integration. 2020 , 116, 162106	4
742	Spin textures and Larmor precession of holes modulated by the spin-orbit coupling confined in the two-dimensional Si Ge mixed-alloy quantum well system. 2020 , 32, 095302	1
741	Transport-induced suppression of nuclear field fluctuations in multi-quantum-dot systems. 2020 , 101,	
740	Thermodynamic properties of a monolayer transition metal dichalcogenide (TMD) quantum dot in the presence of magnetic field. 2021 , 385, 126958	1
739	Rashba effect on the electronic transport through a quantum dot in the atomic limit. 2021 , 323, 114116	0
738	Determining Rashba spin-orbit coupling strength in InSb nanowire quantum dots: Influence of temperature and nuclear environment?. 2021 , 128, 114474	0
737	The effect of size and applied electric field on the spin switch in a two-electron graphene quantum dot and graphene qubit. 2021 , 127, 114555	2
736	Dependences of local density of state on temperature, size, and shape in two-dimensional nano-structured superconductors. 2021 , 580, 1353785	2
735	Exploring the behaviors of electrode-driven Si quantum dot systems: from charge control to qubit operations. 2021 , 13, 332-339	3
734	Spin texture and Berry phase for heavy-mass holes confined in SiGe mixed-alloy two-dimensional system: Intersubband interaction via the coexistence of Rashba and Dresselhaus spin-orbit interactions. 2021 , 389, 127091	0
733	Free-Electron Qubits. 2021 , 533, 2000254	9
732	Recent Advance in Carbon Dots: From Properties to Applications. 2021 , 39, 1364-1388	7
731	Atomistic modeling of InGaN/GaN quantum dots-in-nanowire for graded surface-emitting low-threshold, blue exciton laser. 2021 , 20, 103732	1
730	Einstein-Podolsky-Rosen steering and nonlocality in quantum dot systems. 2021 , 126, 114412	2
729	Correlated spectrum of distant semiconductor qubits coupled by microwave photons. 2021 , 66, 332-338	8

728	Mixed-valence clusters: Prospects for single-molecule magnetoelectrics. 2021 , 426, 213555		11
727	Entanglement evolution of a three-qubit system after interaction with even three-mode nonlinear coherent state. 2021 , 96, 045101		0
726	Tunable Valley Splitting and Bipolar Operation in Graphene Quantum Dots. 2021 , 21, 1068-1073		13
725	Strong spin-orbit interaction and g-factor renormalization of hole spins in Ge/Si nanowire quantum dots. 2021 , 3,		8
724	Ultrafast hole spin qubit with gate-tunable spin-orbit switch functionality. 2021 , 16, 308-312		25
723	Quantum Dot With a Diamond-Shaped Channel MOSFET on a Bulk Si Substrate. 2021 , 68, 405-410		2
722	A highly tunable quadruple quantum dot in a narrow bandgap semiconductor InAs nanowire. 2021 , 13, 3983-3990		3
721	Quantum Internet-Applications, Functionalities, Enabling Technologies, Challenges, and Research Directions. 2021 , 1-1		5
720	Decay rates and decoherence of an interstitial two-level spin impurity in a ferromagnetic lattice. <i>Physical Review A</i> , 2021 , 103,	2.6	1
719	A two-dimensional array of single-hole quantum dots. 2021 , 118, 044002		6
718	Spin and charge localisation due to the interplay of Ac gate voltage and spin-orbit interaction. 2021 , 101, 851-866		
717	Microwaves in Quantum Computing. 2021 , 1,		18
716	Spin Weyl quantum unit: A theoretical proposal. 2021 , 103,		1
715	Longitudinal and transverse electric field manipulation of hole spin-orbit qubits in one-dimensional channels. 2021 , 103,		3
714	Long-range exchange interaction between spin qubits mediated by a superconducting link at finite magnetic field. 2021 , 103,		0
713	A charge sensor integration to tunable double quantum dots on two neighboring InAs nanowires. 2021 , 13, 1048-1054		2
712	Isotopic enrichment of silicon by high fluence $^{28}\text{Si}^{16}\text{O}$ implantation. 2021 , 5,		1
711	Microwave quantum optics as a direct probe of the Overhauser field in a quantum dot circuit quantum electrodynamics device. 2021 , 103,		0

710	Hole-Acceptor-Manipulated Electron Spin Dynamics in CdSe Colloidal Quantum Dots. 2021 , 12, 2126-2132	3
709	Low-temperature environments for quantum computation and quantum simulation*. 2021 , 30, 020702	0
708	Implementation of nonadiabatic holonomic quantum computation via two blockaded Rydberg atoms. 2021 , 136, 1	0
707	Deep learning STEM-EDX tomography of nanocrystals. 2021 , 3, 267-274	9
706	Semiconductor qubits in practice. 2021 , 3, 157-177	38
705	Quantum Power Method by a Superposition of Time-Evolved States. 2021 , 2,	11
704	Effect of pseudospin polarization on wave packet dynamics in graphene antidot lattices (GALs) in the presence of a normal magnetic field. 2021 , 129, 074301	1
703	Creation of Greenberger-Horne-Zeilinger states with thousands of atoms by entanglement amplification. 2021 , 7,	3
702	Pulsed-gate spectroscopy of single-electron spin states in bilayer graphene quantum dots. 2021 , 103,	5
701	Random Sequence Generation using Superconducting Qubits. 2021 ,	1
700	Thermodynamics of General Heisenberg Spin Tetramers Composed of Coupled Quantum Dimers. 2021 , 7, 29	2
699	Few-Electron Single and Double Quantum Dots in an InAs Two-Dimensional Electron Gas. 2021 , 2,	0
698	Gate voltage dependence of noise distribution in radio-frequency reflectometry in gallium arsenide quantum dots. 2021 , 14, 035002	
697	Natural heavy-hole flopping mode qubit in germanium. 2021 , 3,	5
696	Tunable interdot coupling in few-electron bilayer graphene double quantum dots. 2021 , 118, 103101	4
695	Spin polarization and heat generation matching in a quantum dot with magnetic background. 2021 , 393, 127168	0
694	The anti-crossing and dipping spectral behavior of coupled nanocrystal system under the influence of the magnetic field. 2021 , 22, 103835	0
693	A four-qubit germanium quantum processor. 2021 , 591, 580-585	62

692	Distributed geometric quantum computation based on the optimized-control-technique in a cavity-atom system via exchanging virtual photons. 2021 , 29, 8737-8750		5
691	Experimental Protection of the Spin Coherence of a Molecular Qubit Exceeding a Millisecond. 2021 , 38, 030303		2
690	Self-aligned gates for scalable silicon quantum computing. 2021 , 118, 104004		6
689	Implementing a quantum search algorithm with nonorthogonal states. <i>Physical Review A</i> , 2021 , 103,	2.6	3
688	Theoretical study of excitons in GaAs quantum dot molecules obtained by nanoholes filling. 2021 , 124, 105614		0
687	Hole Spin Qubits in Si FinFETs With Fully Tunable Spin-Orbit Coupling and Sweet Spots for Charge Noise. 2021 , 2,		8
686	Nuclear magnetic resonance spectroscopy of nonequilibrium steady states in quantum dots. 2021 , 133, 57003		0
685	Spin Readout of a CMOS Quantum Dot by Gate Reflectometry and Spin-Dependent Tunneling. 2021 , 2,		8
684	Dynamic generation of Greenberger-Horne-Zeilinger states with coupled charge qubits. <i>Physical Review A</i> , 2021 , 103,	2.6	1
683	Quantum dynamics of Mn in dimethylammonium magnesium formate. 2021 , 154, 154201		0
682	Probing hole spin transport of disorder quantum dots via Pauli spin-blockade in standard silicon transistors. 2021 ,		1
681	Micro-scale photon source in a hybrid cQED system*. 2021 , 30, 048507		0
680	Thermally assisted Pauli spin blockade in double quantum dots. 2021 , 103,		2
679	Nonlinear Optical Properties of CdSe and CdTe Core-Shell Quantum Dots and Their Applications. 9,		5
678	Universal quantum gates, artificial neurons, and pattern recognition simulated by LC resonators. 2021 , 3,		1
677	Optimal operation points for ultrafast, highly coherent Ge hole spin-orbit qubits. 2021 , 7,		9
676	Compact spin qubits using the common gate structure of fin field-effect transistors. 2021 , 11, 045004		0
675	Shell Filling and Trigonal Warping in Graphene Quantum Dots. 2021 , 126, 147703		6

674	Materials challenges and opportunities for quantum computing hardware. 2021 , 372,		28
673	References. 2021 , 237-244		
672	Quantum Monte Carlo simulation of BEC-impurity tunneling. 2021 , 103,		0
671	Dispersive readout of reconfigurable ambipolar quantum dots in a silicon-on-insulator nanowire. 2021 , 118, 164002		1
670	Ancilla-mediated qubit readout and heralded entanglement between rare-earth dopant ions in crystals. <i>Physical Review A</i> , 2021 , 103,	2.6	0
669	Fast qubit initialization in a superconducting circuit.		
668	Low-symmetry nanowire cross-sections for enhanced Dresselhaus spin-orbit interaction. 2021 , 103,		1
667	Bell-state tomography in a silicon many-electron artificial molecule. 2021 , 12, 3228		5
666	Measuring entanglement of a rank-2 mixed state prepared on a quantum computer. 2021 , 136, 1		2
665	Efficient entanglement generation and detection of generalized stabilizer states. <i>Physical Review A</i> , 2021 , 103,	2.6	0
664	A High-Sensitivity Charge Sensor for Silicon Qubits above 1 K. 2021 , 21, 6328-6335		1
663	Renormalization of concurrence and quantum Fisher information in two-dimensional XXZ model. 2021 , 136, 1		1
662	Resonant spin amplification in Faraday geometry. 2021 , 103,		
661	An array of four germanium qubits. 2021 ,		1
660	Quantum Computing for Military Applications. 2021 ,		2
659	Probabilistic teleportation of a quantum dot spin qubit. 2021 , 7,		4
658	A double quantum dot defined by top gates in a single crystalline InSb nanosheet.		2
657	Many-body physics in small systems: Observing the onset and saturation of correlation in linear atomic chains. 2021 , 103,		0

656	Exploring landscapes of quantum technology with Patent Network Analysis. 1-15	2
655	Room temperature CNOT operation in a diluted magnetic semiconductor quantum dot. 2021 , 20, 1	
654	Ray-Based Framework for State Identification in Quantum Dot Devices. 2021 , 2,	2
653	Tunneling-related electron spin relaxation in self-assembled quantum-dot molecules. 2021 , 103,	2
652	Quantum Sensing for Energy Applications: Review and Perspective. 2021 , 4, 2100049	6
651	Clock model and parafermions in Rashba nanowires. 2021 , 103,	0
650	Experimental and theoretical studies of hydrogen generation by binary metal (oxide)-graphene oxide composite materials. 2021 , 46, 19802-19813	4
649	A singlet-triplet hole spin qubit in planar Ge. 2021 , 20, 1106-1112	19
648	Light hole states in a strained quantum dot: Numerical calculation and phenomenological models. 2021 , 103,	1
647	Gate control, g factors, and spin-orbit energy of p-type GaSb nanowire quantum dot devices. 2021 , 103,	0
646	Deep reinforcement learning for efficient measurement of quantum devices. 2021 , 7,	6
645	A perspective on scaling up quantum computation with molecular spins. 2021 , 118, 240501	11
644	Universal Singlet-Triplet Qubits Implemented Near the Transverse Sweet Spot. 2021 , 533, 2100054	0
643	Implementation of Geometric Quantum Gates on Microwave-Driven Semiconductor Charge Qubits. 2021 , 4, 2100011	1
642	The decoherence time of anisotropic quantum dot qubit: Effects of electric field, electron-phonon interactions, and impurities. 2021 , 154, 106884	
641	Toward Atomic-Resolution Quantum Measurements with Coherently Shaped Free Electrons. 2021 , 126, 233403	9
640	Nonequilibrium open quantum systems with multiple bosonic and fermionic environments: A hierarchical equations of motion approach. 2021 , 103,	2
639	Tripartite entropic uncertainty relation under phase decoherence. 2021 , 11, 11830	9

638	Describing angular momentum conventions in circularly polarized optically pumped NMR in GaAs and CdTe. 2021 , 327, 106980		0
637	Nuclear Spin Readout in a Cavity-Coupled Hybrid Quantum Dot-Donor System. 2021 , 2,		1
636	Electrically Controlled Crossed Andreev Reflection in Two-Dimensional Antiferromagnets. 2021 , 127, 017701		1
635	Crystalline materials for quantum computing: Semiconductor heterostructures and topological insulators exemplars. 2021 , 46, 596-606		3
634	Atomic-precision advanced manufacturing for Si quantum computing. 2021 , 46, 607-615		6
633	Low-energy subband wave-functions and effective-factor of one-dimensional hole gas. 2021 , 33,		0
632	Berry phase induced entanglement of hole-spin qubits in a microwave cavity. 2021 , 104,		0
631	Quantum logic and entanglement by neutral Rydberg atoms: methods and fidelity.		1
630	Quantum Watermark Algorithm Based on Maximum Pixel Difference and Tent Map. 2021 , 60, 3306-3333		1
629	Crosstalk analysis for single-qubit and two-qubit gates in spin qubit arrays. 2021 , 104,		1
628	Heralded quantum gates for hybrid systems via waveguide-mediated photon scattering. <i>Physical Review A</i> , 2021 , 104,	2.6	2
627	Efficient quantum gates and algorithms in an engineered optical lattice. 2021 , 11, 15402		0
626	Isotropic and Anisotropic g-Factor Corrections in GaAs Quantum Dots. 2021 , 127, 057701		0
625	Absorption properties of graphene quantum dots under ultrashort optical pulses. 2021 , 104,		0
624	Two-qubit sweet spots for capacitively coupled exchange-only spin qubits. 2021 , 7,		1
623	Perspective on exchange-coupled quantum-dot spin chains. 2021 , 119, 030501		2
622	Room-temperature spin-orbit magnetic fields in slightly misoriented (110) InGaAs/InAlAs multiple quantum wells. 2021 , 119, 032405		1
621	Hole spin qubits work at mT magnetic fields. 2021 , 20, 1047-1048		0

620	Variational Quantum Circuits for Machine Learning. An Application for the Detection of Weak Signals. 2021 , 11, 6427	0
619	Quantum Neuromorphic Computing with Reservoir Computing Networks. 2021 , 4, 2100053	5
618	The influence of AA and AB stacking on the ground state magnetic properties of triangular bilayer graphene quantum dots. 2021 , 529, 167822	2
617	Interacting holes in Si and Ge double quantum dots: From a multiband approach to an effective-spin picture. 2021 , 104,	0
616	Three-Dimensional Photoluminescent Crypto-Images Doped with (CdSe)ZnS Quantum Dots by One-Photon and Two-Photon Polymerization. 2021 , 4, 6916-6927	5
615	Novel characterization of dopant-based qubits. 2021 , 46, 616-622	3
614	Quantum computation and simulation with superconducting qubits*. 2021 , 30, 080304	1
613	. 2021 , 22, 52-64	1
612	A graphene edge-mediated quantum gate. 2021 , 119, 064001	
611	Symmetry-controlled singlet-triplet transition in a double-barrier quantum ring. 2021 , 104,	1
610	Polaron formation in a spin chain by measurement-induced imaginary Zeeman field. 2021 , 104,	0
609	Low dephasing and robust micromagnet designs for silicon spin qubits. 2021 , 119, 094001	2
608	Relaxation of single-electron spin qubits in silicon in the presence of interface steps. 2021 , 104,	1
607	P-14.1: Improving the Performance of Inkjet Printed QLED by Annealing Post-treatment. 2021 , 52, 1050-1052	
606	Optical rectification in self-assembled quantum dots: The role of incoherent pumping. 2021 , 156, 106937	0
605	Orbital and electronic entanglement in quantum teleportation schemes. 2021 , 3,	0
604	External electric field effect and impact of encapsulating matrix on optical and electronic properties within CdSe/ZnSe core/shell QDs. 2021 , 96, 125806	0
603	Improvement of optoelectronic and spintronic properties of nanocrystalline Zn _{1-x} Gd _x S films deposited by electron beam technique. 2021 , 130, 105810	1

602	Skyrmion Qubits: A New Class of Quantum Logic Elements Based on Nanoscale Magnetization. 2021 , 127, 067201	7
601	Influences of spin-orbit interaction on quantum speed limit and entanglement of spin qubits in coupled quantum dots. 2021 , 30, 090301	0
600	Extended spin coherence of the zinc-vacancy centers in ZnSe with fast optical access. 2021 , 2,	2
599	Flux dependent current rectification in geometrically symmetric interconnected triple-dot Aharonov-Bohm interferometer. 2021 , 133, 114786	1
598	Evaluation of synthetic and experimental training data in supervised machine learning applied to charge-state detection of quantum dots. 2021 , 2, 045023	2
597	Transparent qubit manipulations with spin-orbit coupled two-electron nanowire quantum dot. 2021 , 11, 18839	0
596	Roadmap on Atomtronics: State of the art and perspective. 2021 , 3, 039201	13
595	Universal quantum state preparation via revised greedy algorithm. 2021 , 6, 045021	0
594	Dispersively Probed Microwave Spectroscopy of a Silicon Hole Double Quantum Dot. 2021 , 16,	1
593	An FPGA-based hardware abstraction of quantum computing systems. 2021 , 20, 2001-2018	0
592	Electronic and magnetic properties of many-electron complexes in charged InAsxP1-x quantum dots in InP nanowires. 2021 , 104,	
591	Computational Materials Insights Into Solid-State Multiqubit Systems. 2021 , 2,	0
590	Quantum interference effects in multi-channel correlated tunneling structures. 2021 , 11, 17676	
589	Designs for a two-dimensional Si quantum dot array with spin qubit addressability. 2021 , 11, 19406	3
588	An Operation Guide of Si-MOS Quantum Dots for Spin Qubits. 2021 , 11,	1
587	Thermal correlations and entropic uncertainty in a two-spin system under DM and KSEA interactions. 2021 , 36,	10
586	Experimental verification of the inertial theorem control protocols.	0
585	Generation of entanglement between quantum dot molecule with the presence of phonon effects in a voltage-controlled junction. 2021 , 409, 127525	

584	Gate-controlled quantum dots in monolayer WSe ₂ . 2021 , 119, 133104		4
583	Long-range two-hybrid-qubit gates mediated by a microwave cavity with red sidebands. <i>Physical Review A</i> , 2021 , 104,	2.6	0
582	Dephasing of Exchange-Coupled Spins in Quantum Dots for Quantum Computing. 2021 , 4, 2100018		1
581	Influence of inhomogeneous magnetic field on the qutrit teleportation via XXZ Heisenberg chain under intrinsic decoherence. 2021 , 247, 167948		1
580	Charge and heat transport through quantum dots with local and correlated-hopping interactions. 2021 , 3,		1
579	Polarization-induced ultrahigh Rashba spin-orbit interaction in ZnO/CdO quantum well. 2021 , 88, 106310		1
578	Thermoelectric transport through strongly correlated double quantum dots with Kondo resonance. 2021 , 415, 127657		1
577	Atomically resolved 3D structural reconstruction of small quantum dots. 2021 , 13, 7550-7557		1
576	Application of quantum dots in electronics. 2021 , 319-336		
575	Ultrafast fs coherent excitonic dynamics in CdSe quantum dots assemblies addressed and probed by 2D electronic spectroscopy. 2021 , 154, 014301		4
574	Long-Distance Superexchange between Semiconductor Quantum-Dot Electron Spins. 2021 , 126, 017701		5
573	Solid State Qubits. 2021 , 269-301		
572	Conditional quantum operation of two exchange-coupled single-donor spin qubits in a MOS-compatible silicon device. 2021 , 12, 181		15
571	Nanostructures: A Solution to Quantum Computation and Energy Problems. 2021 , 83-107		0
570	Non-classicality of two superconducting-qubits interacting independently with a resonator cavity: trace-norm correlation and Bures-distance entanglement. 2021 , 68, 1-9		1
569	Inertial Theorem: Overcoming the quantum adiabatic limit. 2021 , 3,		3
568	Solid-State Spin Qubits. 2021 , 259-273		
567	Quantum Computing with Spins in Solids.		2

566	Quantum Dots. 3-47	4
565	Biomolecular Electronics and Protein-Based Optical Computing. 33-59	2
564	Semiconductor few-electron quantum dots as spin qubits. 2006 , 298-305	1
563	Creation and Detection of Mobile and Non-Local Spin-Entangled Electrons. 2004 , 179-202	3
562	Spectroscopy on Single Dots [Monitoring Carrier Interaction with the Environment. 2001 , 51-62	6
561	Optical Spectroscopy on Single Quantum Dots: Charged Excitons. 2001 , 63-74	3
560	Spintronics, Quantum Computing, and Quantum Communication in Quantum Dots. 2002 , 241-265	3
559	Encyclopedia of Complexity and Systems Science. 2009 , 5745-5783	19
558	Interactions, Spins and the Kondo Effect in Quantum-Dot Systems. 2003 , 1-42	3
557	Nano-Spintronics with Lateral Quantum Dots. 2003 , 87-122	6
556	Quantum dots as biophotonics tools. 2014 , 1199, 3-9	4
555	Gate-Defined Quantum Dots: Fundamentals and Applications. 2020 , 107-133	2
554	Formal Verification of Optical Quantum Flip Gate. 2014 , 358-373	4
553	Towards Quantum Repeaters with Solid-State Qubits: Spin-Photon Entanglement Generation Using Self-assembled Quantum Dots. 2015 , 365-402	3
552	Coherent Control of Dark Excitons in Semiconductor Quantum Dots. 2017 , 123-164	2
551	First Principles Theory of Nano-Materials, Spintronic Materials, and Nano-Spintronic Materials. 2007 , 46-57	1
550	Single Photons from Single Quantum Dots [New Light for Quantum Information Processing. 2008 , 3-15	2
549	Quantum-Dot Spin Qubit and Hyperfine Interaction. 2008 , 17-29	5

548	Principles of Josephson-Junction-Based Quantum Computation. 2008 , 315-368	2
547	Quantum Computing. 2009 , 297-313	3
546	Spin Properties of Confined Electrons in Si. 2008 , 179-209	1
545	A Robust and Fast Method to Compute Shallow States without Adjustable Parameters: Simulations for a Silicon-Based Qubit. 2009 , 221-239	1
544	Photon-Assisted Tunneling in Quantum Dots. 2009 , 241-258	1
543	Electron-Spin Manipulation in Quantum Dot Systems. 2009 , 15-34	2
542	Single-Electron-Spin Measurements in Si-Based Semiconductor Nanostructures. 2009 , 81-100	0
541	Si/SiGe Quantum Devices, Quantum Wells, and Electron-Spin Coherence. 2009 , 101-127	2
540	Quantitative Treatment of Decoherence. 2009 , 141-167	1
539	Optical Spectroscopy of Spins in Coupled Quantum Dots. 2009 , 331-366	1
538	Optical properties of epitaxially grown wide bandgap single quantum dots. 2009 , 71-119	2
537	Learning with Missing or Incomplete Data. 2009 , 1-4	2
536	Simulating Arbitrary Quantum Statistics with Entangled Photons. 2013 , 95-111	1
535	Implementation of State Transfer Hamiltonians in Spin Chains with Magnetic Resonance Techniques. 2014 , 183-222	4
534	Quantum Tunneling of the Collective Spins of Single-Molecule Magnets: From Early Studies to Quantum Coherence. 2014 , 17-60	2
533	Silicon Atomic Quantum Dots Enable Beyond-CMOS Electronics. 2014 , 33-58	20
532	Silicon Atomic Quantum Dots Enable Beyond-CMOS Electronics. 2014 , 33-58	10
531	Shot Noise for Entangled and Spin-Polarized Electrons. 2003 , 241-274	3

530	Quantum Computation and Spin Electronics. 2000 , 399-428	5
529	Decoherence of the Superconducting Persistent Current Qubit. 2000 , 429-438	9
528	Optoelectronic Manipulation of Spin in Semiconductors. 2004 , 49-60	1
527	Epitaxial II-VI semiconductor quantum structures involving dilute magnetic semiconductors. 2020 , 153-187	1
526	Coherent optical spectroscopy and manipulation of single quantum dots. 2003 , 281-365	2
525	Colloidal Quantum Dots as Platforms for Quantum Information Science. 2021 , 121, 3186-3233	34
524	Surpassing the classical limit in magic square game with distant quantum dots coupled to optical cavities. 2020 , 10, 22202	3
523	Room-temperature electron spin dynamics of Ce ³⁺ ions in a YAG crystal. 2017 , 110, 222405	9
522	Environmental noise spectroscopy with qubits subjected to dynamical decoupling. 2017 , 29, 333001	41
521	Fabrication process and failure analysis for robust quantum dots in silicon. 2020 , 31, 505001	9
520	Recent advances in mechanical strain engineering of low-dimensional semiconductors and their applications in high-performance quantum emitters. 2020 , 35, 103002	2
519	Quantum device fine-tuning using unsupervised embedding learning. 2020 , 22, 095003	6
518	Transparently manipulating spin-orbit qubit via exact degenerate ground states. 2020 , 29, 083203	1
517	Quantum speed limit time and entanglement in a non-Markovian evolution of spin qubits of coupled quantum dots. 2020 , 29, 124203	1
516	g-tensor resonance in double quantum dots with site-dependent g-tensors. 2021 , 1, 015003	5
515	Triplet-blockaded Josephson supercurrent in double quantum dots. 2020 , 102,	4
514	Spectrum of the Nuclear Environment for GaAs Spin Qubits. 2017 , 118, 177702	40
513	Graphane with carbon dimer defects: Robust in-gap states and a scalable two-dimensional platform for quantum computation. 2019 , 3,	4

512	Theory of field-modulated spin valley orbital pseudospin physics. 2020 , 2,	2
511	Magnetically confined bound states in Rashba systems. 2020 , 2,	4
510	Quantum computing with multidimensional continuous-variable cluster states in a scalable photonic platform. 2020 , 2,	17
509	Exchange interaction of hole-spin qubits in double quantum dots in highly anisotropic semiconductors. 2020 , 2,	4
508	Phonon spectral density in a GaAs/AlGaAs double quantum dot. 2020 , 2,	1
507	Fluctuation-dissipation theorem and fundamental photon commutation relations in lossy nanostructures using quasinormal modes. 2020 , 2,	5
506	Quantized quasinormal-mode description of nonlinear cavity-QED effects from coupled resonators with a Fano-like resonance. 2020 , 2,	20
505	Optimized Quantum Compilation for Near-Term Algorithms with OpenPulse. 2020 ,	12
504	Correlation between Quantum Entanglement and Quantum Coherence in the Case of XY Spin Chains with the Dzyaloshinskii-Moriya Interaction. 2020 , 131, 209-219	1
503	Theoretical Analysis of the Optimal Conditions for Photon-Spin Quantum State Transfer. 2007 , 76, 114004	3
502	Cavity Quantum Electrodynamics. 2013 , 177-260	2
501	Introduction to the Physics of Quantum Dots. 2001 , 100, 275-286	2
500	Nano-Optics on Individual Quantum Objects - From Single to Coupled Semiconductor Quantum Dots. 2002 , 102, 475-494	2
499	Optical Properties of Manganese-Doped Individual CdTe Quantum Dots. 2005 , 108, 527-540	4
498	Electronic Correlations within Fermionic Lattice Models. 2007 , 112, 537-547	1
497	Singlet-Triplet Dephasing in Asymmetric Quantum Dot Molecules. 2009 , 116, 874-876	1
496	Phonon-Induced Pure Dephasing of Two-Electron Spin States in Vertical Quantum Dot Molecules. 2009 , 116, 877-878	1
495	Spectroscopy of Indirect Excitons in Vertically Stacked CdTe Quantum Dot Structures. 2011 , 120, 856-858	2

494	Magnetic Susceptibility of Coupled Double GaAs Quantum Dot in Magnetic Fields. 2017 , 131, 1491-1496	13
493	Influence of Magnetic Field on Dark States in Transport through Triple Quantum Dots. 2017 , 132, 108-111	2
492	Model of Qubit in Multi-Electron Quantum Dot. 2001 , 99, 277-292	5
491	Secure key generation and distribution scheme based on two independent local polarization scramblers. 2021 , 60, 147-154	2
490	Free Electron Qubits. 2019 ,	3
489	Self-error-corrected hyperparallel photonic quantum computation working with both the polarization and the spatial-mode degrees of freedom. 2018 , 26, 23333-23346	18
488	Optical control of entanglement and coherence for polar molecules in pendular states. 2019 , 27, 26588-26599	3
487	Efficient all-optical router and beam splitter for light with orbital angular momentum. 2020 , 28, 19750-19759	3
486	Quantum information processing with closely-spaced diamond color centers in strain and magnetic fields [Invited]. 2019 , 9, 4654	9
485	Entanglement demonstration on board a nano-satellite. 2020 , 7, 734	17
484	Quantum Entanglement and Teleportation of Quantum-Dot States in Microcavities. 2007 , 5, 51-59	3
483	Adiabatic state distribution using anti-ferromagnetic spin systems. 2019 , 6,	2
482	The self-consistent quantum-electrostatic problem in strongly non-linear regime. 2019 , 7,	5
481	Quantum gates between distant qubits via spin-independent scattering. 1, 36	1
480	Lattice Surgery with a Twist: Simplifying Clifford Gates of Surface Codes. 2, 62	23
479	Phonon-assisted relaxation and decoherence of singlet-triplet qubits in Si/SiGe quantum dots. 2, 70	8
478	A Silicon Surface Code Architecture Resilient Against Leakage Errors. 3, 212	6
477	A SHORT SURVEY ON QUANTUM COMPUTERS. 2006 , 28,	6

476	Quantum computers: can they be made 'large'?. 1999 , 169, 691	4
475	A quantum bit based on a Josephson contact between conventional and high-temperature superconductors (theory). 1999 , 169, 917	7
474	Chernogolovka 2000: Mesoscopic and strongly correlated electron systems The current state of quantum mesoscopics. 2001 , 171, 1099	5
473	Circular photogalvanic effect in nanostructures. 2002 , 172, 1461	7
472	Quantum computers and quantum computations. 2005 , 175, 3	50
471	Large-radius bipolaron and the polaron-polaron interaction. 2010 , 180, 449	9
470	Spin phenomena in semiconductors: physics and applications. 2010 , 180, 759	4
469	Spectroscopy of cold rubidium Rydberg atoms for applications in quantum information. 2016 , 186, 206-219	3
468	Theoretical Study on Spin-Selective Coherent Electron Transfer in a Quantum Dot Array. 2020 , 6, 2	1
467	Diffusion limit of a generalized matrix Boltzmann equation for spin-polarized transport. 2011 , 4, 1159-1191	11
466	Preparation and study of the entanglement of the Schrödinger cat state on the ibmq-melbourne quantum computer. 2020 , 23, 43001	2
465	Properties of the internal excited state of the strong-coupling magneto-bipolaron in a parabolic quantum dot. 2014 , 63, 027501	4
464	The mechanisms of electric-dipole spin resonance in quasi-one-dimensional semiconductor quantum dot. 2015 , 64, 167303	2
463	Power Dependence of Electric Dipole Spin Resonance. 2014 ,	1
462	Dirac Formulation for Universal Quantum Gates and Shor's Integer Factorization in High-frequency Electric Circuits. 2020 , 89, 124712	3
461	Single-Electron Transport through Semiconducting Nanowires: A Comparison between Silicon and Germanium. 2011 , 50, 04DN06	1
460	Progress in the research of Silicon and Germanium quantum computing materials. 2021 , 0-0	
459	Semiconductor Quantum Computing: Toward a CMOS Quantum Computer on Chip.. 2021 , 2-14	2

- 458 Optical properties of two-dimensional two-electron quantum dot in parabolic confinement. **2021**, 19, 551-558
- 457 Silicon qubit devices. **2021**, 20, 265-293
- 456 Detecting initial system-environment correlations in open systems. *Physical Review A*, **2021**, 104, 2.6 0
- 455 Applications of nanomagnets as dynamical systems: II. **2021**, 33, 2
- 454 Computational Insights into the Role of External and Local Electric Fields in Macrocyclic Chemical and Biological Systems. **2021**, 22, 2484-2492
- 453 Mapping Quantum Chemical Dynamics Problems to Spin-Lattice Simulators. **2021**, 17, 6713-6732 1
- 452 PyCCE: A Python Package for Cluster Correlation Expansion Simulations of Spin Qubit Dynamics. **2021**, 4, 2100254 0
- 451 Filter-function formalism and software package to compute quantum processes of gate sequences for classical non-Markovian noise. **2021**, 3, 1
- 450 Exploring The Ultimate Limits of Control: Quantum Networks for Non-Classical Information Processing. **2000**, 431-442
- 449 Soliton Quantum Bit. **2001**, 449-457
- 448 Superconductors, Quantum Dots, and Spin Entanglement. **2001**, 46-66
- 447 Double Quantum Dot Coupled to Two Superconductors: Transport and Spin Entanglement. **2001**, 307-315
- 446 Electron Transport Through Quantum Dots: An Unusual Kondo Effect. **2001**, 153-161
- 445 Bibliography. **2001**, 535-547
- 444 Transport Through Artificial Kondo Impurities. **2001**, 317-324
- 443 Quantum Information Processing Using Electron Spins in Quantum Dots. **2001**, 100, 109-127
- 442 Spintronics and Quantum Dots for Quantum Computing and Quantum Communication. **2002**, 83-104 1
- 441 Spin systems of quantum dots. **2002**, 172, 1455

- 440 Market price simulator based on analog electrical circuit. **2002**, 214-221 1
- 439 Quantum Computation Using Artificial Molecules. **2002**, 348-356
- 438 Of Decoherent Electrons and Disordered Conductors. **2002**, 49-81
- 437 Noise Correlations, Entanglement, and Bell Inequalities. **2003**, 313-335
- 436 Novel Phenomena in Small Individual and Coupled Quantum Dots. **2003**, 123-157
- 435 Microwave Spectroscopy on Single and Coupled Quantum Dots. **2003**, 43-85
- 434 The Generation and Detection of Single and Entangled Electrons in Mesoscopic 2DEG Systems. **2003**, 275-296
- 433 Superconducting quantum bit based on the Cooper pair box. **2003**, 173-195
- 432 Fabrication and Characterization of Magnetic Nanostructures. **2004**, 21-34
- 431 Electronic Transport through the Double-Dot System. **2004**, 105, 523-528 1
- 430 Spin Polarized Transport through the Double-Dot System. **2005**, 108, 885-890 1
- 429 Development of Near-field Scanning Optical Microscope Operating in Magnetic Field at Low Temperature. **2006**, 49, 649-652
- 428 Electron Spins in Self-Assembled (In,Ga)As/GaAs Quantum Dots Studied by Pump-Probe Faraday Rotation. **2006**, 110, 287-293
- 427 Kondo Physics in Artificial Molecules. **2007**, 45-75
- 426 Entangled States of Photon Pairs from Radiative Cascades in Semiconductor Quantum Dots. **2007**,
- 425 Ballistic Transport Phenomena in Nanostructures of Paraelectric Lead Telluride. **2007**, 112, 127-139
- 424 Manipulation of Spins and Coherence in Semiconductors.
- 423 Single-Photon Generation from Single Quantum Dots. **2008**, 329-349

- 422 Hyperfine Interaction Induced Decoherence and Quantum Information Processing with Quantum Dots. **2008**,
- 421 Absorption and Scattering of Light on Electron and Positron States in Quasi-Zero-Dimensional Nanosystems. **2008**, 9, 289-304
- 420 Electron-Spin Dynamics in Self-Assembled (In,Ga)As/GaAs Quantum Dots. **2009**, 51-80
- 419 Encyclopedia of Complexity and Systems Science. **2009**, 9644-9654
- 418 Magneto-optical Kerr effect tomography of an electron spin state in a semiconductor quantum dot. **2009**,
- 417 Quantum information with quantum dot light sources. **2009**, 367-384
- 416 Spin in CdTe/ZnTe Quantum Dot: Its Potential for Information Storage. **2009**, 116, S-13-S-18 0
- 415 Differential Reflection Spectroscopy of Photonic Crystal Cavities Containing Coupled InAs Quantum Dots. **2010**,
- 414 Carrier spin dynamics in self-assembled quantum dots. **2010**, 39-61
- 413 Controlling entanglement sudden birth and sudden death of two-atom X-states in Tavis-Cummings model. **2010**, 59, 6799 6
- 412 Multipartite entanglement in the Heisenberg XX chain with impurity. **2010**, 59, 2212
- 411 Swap operation in a two-qubit anisotropy XYZ model in the presence of an inhomogeneous magnetic field. **2010**, 59, 1468 2
- 410 Optically induced spin rotations in quantum dots. **2010**, 63-83 1
- 409 Intermolecular- and Intramolecular-Level Logic Devices. 213
- 408 Quantum Computation: Principles and Solid-State Concepts.
- 407 Semiconductor-Based Quantum Logic Gates. **2011**, 311-332
- 406 Alternative Models of Quantum Computation. **2011**, 627-662
- 405 Coherent Spin Dependent Landau-Zener Tunneling in Mixed Valence Dimers. **2011**, 329-350

- 404 Parametric properties of the electron spin relaxation due to spin-orbit interaction in InAs quantum dots. **2011**, 60, 017204 3
- 403 Level Broadening Effect in Electron Tunneling through Double Quantum Dots with Different Factors. **2011**, 50, 04DJ02
- 402 Simulation Study of Charge Modulation in Coupled Quantum Dots in Silicon. **2011**, 50, 04DJ05
- 401 Nanodevice for High Precision Readout of Electron Spin. **2011**, 119, 651-653
- 400 Atomic-Scale Devices in Silicon by Scanning Tunneling Microscopy. **2012**, 181-196
- 399 Classical and Quantum Information - Pages 689-707. **2012**, 689-707
- 398 Polaron spin relaxation in a two-dimensional quantum dot. **2012**, 61, 017107 1
- 397 A Multi-Purpose Electrostatically Defined Silicon Quantum Dot Structure. **2012**, 51, 02BJ10
- 396 Correlation of $1/f$ Noise between Semiconductor Point Contacts with a Common Lead. **2012**, 51, 02BJ08
- 395 Introduction and Preliminaries. **2013**, 1-11
- 394 Artificial Molecular Nanomagnets as Spin-Based Quantum Logic Gates. **2013**, 249-266
- 393 Entanglement properties of two coupled atoms in Kerr medium. **2013**, 62, 174206 2
- 392 Encyclopedia of Complexity and Systems Science. **2013**, 1-16
- 391 Magnetotransport properties of serial double quantum dots in the spin blockade regime. **2013**, 62, 017201 2
- 390 Single-Electron Transistor and Quantum Dots on Graphene. **2013**, 325-350
- 389 Quantum Memories: Quantum Dot Spin Qubits. **2013**, 25-38
- 388 Single-Electron Tunneling Transistors Utilizing Individual Dopant Potentials. **2013**, 305-324 1
- 387 A Spin Quantum Bit Architecture with Coupled Donors and Quantum Dots in Silicon. **2013**,

- 386 Orbital Structure and Transport Characteristics of Single Donors. **2013**,
- 385 Spin-Polarized Transport in QuantumDots System with Rashba SpinOrbitInteraction. **2013**,
- 384 Optical Properties of Lateral InGaAs Quantum Dot Molecules Single- and Bi-Layers. **2014**, 51-75
- 383 Electron spin relaxation control in single electron QDs. **2013**, 1, 203-210
- 382 Electro-Optical Hysteresis of Nanoscale Hybrid Systems. **2014**, 85-95
- 381 Quantum teleportation in an XXZ spin chain system with three-site interaction. **2014**, 63, 110305 2
- 380 Introduction. **2014**, 1-9
- 379 Quantum computing using applied electric field to quantum dots. **2014**, 2, 15-22 1
- 378 Semiconductor-based Quantum Information. **1999**, 73-76
- 377 Quantum manipulations of small Josephson junctions and the measurement process performed with a single-electron transistor. **1999**, 27-32
- 376 Decoherence and Recoherence in Quantum Computation. **1999**, 7-12
- 375 Advances in Electrospun Nanofibers Modeling. **2014**, 1-110
- 374 Nanotechnology in Electronics. **2014**, 17-36
- 373 Epitaxial Quantum Dot Infrared Photodetectors. 1-30 2
- 372 Encyclopedia of Complexity and Systems Science. **2015**, 1-69
- 371 The valley degree of freedom of an electron. **2015**, 64, 187301 2
- 370 Effect of electronic correlations on magnetotransport through a parallel double quantum dot. **2015**, 64, 107201
- 369 Bilaterally Symmetrical Transformation between Independent Operators and Rotations. **2015**, 05, 79-88

368 Tailoring Characteristic Wavelength Range of Circular Quantum Dots for Detecting Signature of Virus in IR Region. **2015**, 353-363

367 References. **2015**, 239-269

366 Introduction. **2016**, 1-12

365 Dopant-Atom Silicon Tunneling Nanodevices. **2015**, 181-206

364 Coupled Si Quantum Dots for Spin-Based Qubits. **2015**, 231-253

363 Spin Quantum Computing. **2016**, 71-103

362 Zastosowania grafenu. **2016**,

361 Quantum Computing with Solid-State Systems. **2016**, 553-585

360 Introduction. **2017**, 1-26

359 Nuclear Spin Dynamics in Double Quantum Dots: Multi-stability, Dynamical Polarization, Criticality and Entanglement. **2017**, 65-141

358 Quantum entanglement concentration for photonic polarization state assisted by electron spin. **2017**, 66, 240301 1

357 A Self-assembled Quantum Dot as Single Photon Source and Spin Qubit: Charge Noise and Spin Noise. **2017**, 287-323

356 Effect of doping symmetry on electron spin relaxation dynamics in (110) GaAs/AlGaAs quantum wells. **2017**, 66, 046802 1

355 Bipolar spin blockade, many-body tunneling and long-range resonance in triple quantum dots. **2017**, 118, 67002

354 Nanospectroscopy of single quantum dots with local strain control using a phase-change mask. **2017**, 56, 08LA02

353 Nanosilicon for quantum information. **2017**, 637-654

352 Nonlinear Dynamics in Quantum Photonic Structures. **2017**, 661-730

351 Quantum Information Processing Using the Exchange Interaction. **2018**, 08, 139-160 5

- 350 Pump-orientation-probe technique and its applications. **2018**, 67, 097201
- 349 Recent Developments in Synthesis of Colloidal Quantum Dots. **2018**, 25, 346-354
- 348 Rydberg atoms and quantum information. **2019**,
- 347 Manipulation of Cooper pair entanglement in hybrid topological Josephson junctions. **2019**,
- 346 Femtosecond laser direct writing of optical quantum logic gates. **2019**, 68, 104205 1
- 345 Optoelectronic Properties and Applications of Quantum Dots. **2019**, 503-536
- 344 Calculating the band structure of an array of spherical quantum dots. **2020**,
- 343 Cluster-based Haldane states in spin-1/2 cluster chains. **2020**, 2, 1
- 342 Fast population transfer and entanglement preparation among four superconducting flux qubits. **2020**, 17, 105203 0
- 341 Constructing clock-transition-based two-qubit gates from dimers of molecular nanomagnets. **2020**, 2, 5
- 340 Interplay of dark states and superconducting correlations in charge transport through quantum dot trimers. **2021**, 545, 168703
- 339 Quantum Spin in an Environment. **2020**, 145-203
- 338 Detection of charge states of an InAs nanowire triple quantum dot with an integrated nanowire charge sensor. **2020**, 117, 262102 1
- 337 Bichromatically-controlled entanglement between asymmetric quantum dots in a photonic cavity. **2021**, 54, 015504
- 336 Direction inversion of spin-polarization current and exceptional tunnel magnetoresistance. **2020**, 10, 125002
- 335 g-factors in LaAlO₃/SrTiO₃ quantum dots. **2020**, 4,
- 334 Geometrical Effects on Exchange Coupling in System of Near-Surface Donors and Quantum Dots. **2020**, 54, 1904-1906
- 333 A New Error-Modeling of Hardy's Paradox for Superconducting Qubits and Its Experimental Verification. **2020**, 1, 1-24 0

- 332 Controllable growth of GeSi nanowires on trench patterned Si(001) substrate. **2020**, 69, 028102 1
- 331 Radio-Frequency Capacitive Gate-Based Charge Sensing for Semiconductor Quantum Dots. **2020**, 83-128 1
- 330 Motivation and Outline. **2020**, 1-12
- 329 Noisy, Intermediate-Scale Quantum Computing and Industrial Revolution 4.0. **2020**, 205-225 1
- 328 Results. **2020**, 83-97
- 327 Measurement of magnetically insensitive state coherent time in blue dipole trap. **2020**, 69, 080301 0
- 326 Many-body tunneling and nonequilibrium dynamics in double quantum dots with capacitive coupling. **2020**, 33, 075301
- 325 Advanced 3D Integration Technologies in Various Quantum Computing Devices. **2021**, 1-1 0
- 324 Witnessing nonclassicality through large deviations in quantum optics. **2020**, 2,
- 323 Properties of optical bipolaron in symmetric quantum dot. **2021**, 107082
- 322 Inter- and intraband Coulomb interactions between holes in silicon nanostructures. **2021**, 104, 0
- 321 Exploring the nonlocal advantage of quantum coherence and Bell nonlocality in the Heisenberg XYZ chain. **2020**, 17, 095202
- 320 Optically Driven Quantum Computing Devices Based on Semiconductor Quantum Dots. **2005**, 147-161
- 319 Bang-Bang Refocusing of a Qubit Exposed to Telegraph Noise. **2005**, 247-272
- 318 Controlling Spin Qubits in Quantum Dots. **2005**, 115-132
- 317 Monte Carlo Method for a Superconducting Cooper-pair-box Charge Qubit Measured by a Single-electron Transistor. **2006**, 171-179
- 316 Spin-Based Quantum Dot Quantum Computing. 83-114
- 315 Non-Markovian Dynamics of a Localized Electron Spin Due to the Hyperfine Interaction. **2005**, 235-243

- 314 Transport and Noise of Entangled Electrons. **1999**, 105-113
- 313 Quantum Information: Entanglement, Purification, Error Correction, and Quantum Optical Implementations. **2002**, 199-239 0
- 312 Quantum Coupling in Quantum Dot Molecules. **2008**, 239-266
- 311 Studies of Semiconductor Quantum Dots for Quantum Information Processing. **2008**, 267-296
- 310 Physical Implementations of Quantum Computation. **2007**, 281-310 0
- 309 Optical Bistability, Optical Computing, Spintronics and Quantum Computing. **2007**, 655-684
- 308 Pyramidal Quantum Dots Grown by Organometallic Chemical Vapor Deposition on Patterned Substrates. **2007**, 591-638
- 307 Large-Scale Integration of Quantum Dot Devices on MBE-Based Quantum Wire Networks. **2007**, 639-664
- 306 Quantum Neural Networks and Quantum Intelligence. **2021**, 165-185
- 305 Geometrical confinement effects on fundamental thermal properties of rutile and anatase TiO₂ cylindrical and tubular nanostructures. **2020**, 95, 105706 1
- 304 Building a quantum computer (invited). **2020**,
- 303 Impact of Kondo correlations and spin-orbit coupling on spin-polarized transport in carbon nanotube quantum dot. **2022**, 546, 168795
- 302 Miniaturizing neural networks for charge state autotuning in quantum dots. **2022**, 3, 015001 1
- 301 Toward Hole-Spin Qubits in Si p-MOSFETs within a Planar CMOS Foundry Technology. **2021**, 16, 0
- 300 Two-body Wigner molecularization in asymmetric quantum dot spin qubits. **2021**, 104, 1
- 299 Fast spin-valley-based quantum gates in Si with micromagnets. **2021**, 7, 0
- 298 Spin-valley qubits in gated quantum dots in a single layer of transition metal dichalcogenides. **2021**, 104, 2
- 297 Robust control of quantum systems by quantum systems. *Physical Review A*, **2021**, 104, 2.6 0

296	Investigating stability and tunability of quantum dot transport in silicon MOSFETs via the application of electrical stress.		1
295	Phase controllable four-wave mixing in the hybrid opto-electromechanical system. 2021 , 130, 194401		1
294	Light management with quantum nanostructured dots-in-host semiconductors. 2021 , 10, 231		1
293	Recent progresses of quantum confinement in graphene quantum dots. 2022 , 17, 1		3
292	Opinion: Democratizing Spin Qubits. 5, 584		0
291	Renormalization-group approach to quantum Fisher information in the two-dimensional XY model. 2021 , 136, 1		1
290	Influence of the spin-orbit split-off valence band on the hole g factor in semiconductor nanocrystals. 2021 , 104,		0
289	Quantum state tomography as a numerical optimization problem.		
288	Anisotropy-exchange resonance as a mechanism for entangled state switching. <i>Physical Review A</i> , 2021 , 104,	2.6	0
287	Quantum-coherent nanoscience. 2021 ,		10
286	Searching strong 'spin'-orbit coupled one-dimensional hole gas in strong magnetic fields. 2021 , 34,		0
285	Asymmetric Spin Transport in Colloidal Quantum Dot Junctions.		
284	Unconventional Thermal and Magnetic-Field-Driven Changes of a Bipartite Entanglement of a Mixed Spin-(1/2,) Heisenberg Dimer with an Uniaxial Single-Ion Anisotropy. 2021 , 11,		3
283	Voltage-controlled Hubbard spin transistor. 2021 , 3,		0
282	Tunable Anisotropic Quantum Rabi Model via a MagnonSpin-Qubit Ensemble. 2021 , 16,		4
281	Appendices. 2021 , 469-470		
280	Simulation of Nonequilibrium Spin Dynamics in Quantum Dots Subjected to Periodic Laser Pulses. 2021 , 115-131		
279	High-Temperature Spin Qubit in Silicon Tunnel Field-Effect Transistors. 2021 , 143-164		

278	Ultrafast coherent control of a hole spin qubit in a germanium quantum dot.. 2022 , 13, 206		5
277	Nature of electronic excitations in small non-stoichiometric quantum dots.		4
276	Designing high-fidelity multi-qubit gates for semiconductor quantum dots through deep reinforcement learning. 2020 ,		0
275	A Hardware-Accelerated Qubit Control System for Quantum Information Processing. 2020 ,		
274	Fast universal quantum gate above the fault-tolerance threshold in silicon.. 2022 , 601, 338-342		14
273	Quantum logic with spin qubits crossing the surface code threshold.. 2022 , 601, 343-347		17
272	Silicon qubits move a step closer to achieving error correction.. 2022 , 601, 320-322		1
271	Universal quantum gates for path photonic qubit. 2022 , 21, 1		0
270	Computational Perspective on Recent Advances in Quantum Electronics: From Electron Quantum Optics to Nanoelectronic Devices and Systems.. 2022 ,		0
269	Pulse-level noisy quantum circuits with QuTIP. 6, 630		3
268	16x8 quantum dot array operation at cryogenic temperatures.		0
267	The effect of CTAB and lactic acid as surfactants in ZnS quantum dots: a simple method for colloidal synthesis and characterization. 1		0
266	Harnessing the Quantum Behavior of Spins on Surfaces.. 2022 , e2107534		1
265	Detection of extremely large magnetoresistance in a ring-shaped array of magnetic quantum dots with very high performance and controllable parameters.. 2022 ,		
264	Quantized quasinormal-mode theory of coupled lossy and amplifying resonators. <i>Physical Review A</i> , 2022 , 105,	2.6	1
263	In-plane electric and exchange fields engineered corner state bismuthene quantum dots. 2022 , 630, 413641		1
262	Anisotropic g -tensors in hole quantum dots: Role of transverse confinement direction. 2022 , 105,		0
261	Nanomaterials for Quantum Information Science and Engineering.. 2022 , e2109621		6

260	Circuit-Based Compact Model of Electron Spin Qubit. 2022 , 11, 526		0
259	Effect of Dzyaloshinskii-Moriya Interaction on the Entanglement and Quantum Phase Transition in Two-Dimensional XXZ Model. 2022 , 61, 1		
258	Variability of Electron and Hole Spin Qubits Due to Interface Roughness and Charge Traps. 2022 , 17,		0
257	Dissipationless Spin-Charge Conversion in Excitonic Pseudospin Superfluid.. 2022 , 128, 066601		0
256	Electrical control of the g tensor of the first hole in a silicon MOS quantum dot. 2021 , 104,		1
255	Probing Two-Electron Multiplets in Bilayer Graphene Quantum Dots.. 2021 , 127, 256802		3
254	Hidden Treasures of Semiconducting Materials for Quantum Computing. 2022 , 132-153		
253	Noise Reduction Methods for Charge Stability Diagrams of Double Quantum Dots. 2022 , 1-1		
252	Negativity and Quantum Phase Transition in a Mixed Spin-(1/2,5/2,1/2) Ising-Heisenberg Branched Chain.		
251	Fast high-fidelity geometric gates for singlet-triplet qubits. <i>Physical Review A</i> , 2022 , 105,	2.6	0
250	Optoelectronic properties of Ag ₂ S/graphene and FeS ₂ /graphene nanostructures and interfaces: A density functional study including dispersion forces. 2022 , 37, 1047-1058		0
249	Entanglement teleportation in anisotropic Heisenberg XY spin model with Herring-Blicker coupling. 2022 , 37,		
248	Floquet vortex states induced by light carrying an orbital angular momentum. 2022 , 105,		0
247	Hole-spin qubits in Ge nanowire quantum dots: Interplay of orbital magnetic field, strain, and growth direction. 2022 , 105,		0
246	Qubit based on spin-singlet Yu-Shiba-Rusinov states. 2022 , 105,		1
245	Frustration-controlled quantum phase transition between multiple singular two-stage Kondo behaviors in a tetrahedral quadruple quantum dot structure. 2022 , 105,		2
244	Dynamics of classical and quantum correlations in a zigzag graphene nanoribbon under noisy environments. 2022 , 21, 1		
243	Spatiotemporal spread of Fermi-edge singularity as time-delayed interaction and impact on time-dependent RKKY-type coupling. 2022 , 4,		

242	Quantum Technologies for Engineering: the materials challenge. 2022 , 2, 013002	0
241	Fast and High-Fidelity State Preparation and Measurement in Triple-Quantum-Dot Spin Qubits. 2022 , 3,	1
240	A hole spin qubit in a fin field-effect transistor above 4 kelvin. 2022 , 5, 178-183	4
239	Complete Mapping of Interacting Charging States in Single Coupled Colloidal Quantum Dot Molecules.. 2022 ,	1
238	An integrated photonic circuit for color qubit preparation by third-order nonlinear interactions.. 2022 , 12, 5154	
237	Universal quantum operation of spin-3/2 Blume-Capel chains. <i>Physical Review A</i> , 2022 , 105,	2.6
236	A 9.2-GHz clock transition in a Lu(II) molecular spin qubit arising from a 3,467-MHz hyperfine interaction.. 2022 ,	9
235	Qubits made by advanced semiconductor manufacturing. 2022 , 5, 184-190	11
234	Dyakonov-Perel and Elliott-Yafet spin relaxation rates in InGaAs/InAlAs multiple quantum wells at room temperature. 2022 , 15, 043001	0
233	Entangling spin and charge degrees of freedom in semiconductor quantum dots. <i>Physical Review A</i> , 2022 , 105,	2.6
232	High-fidelity CNOT gate for spin qubits with asymmetric driving using virtual gates. 2022 , 105,	
231	Strong-coupling emergence of dark states in XX central spin models. 2022 , 105,	
230	Changing Spin and Orbital Ground State Symmetries in Colloidal Nanoplatelets with Magnetic Fields.	1
229	Spatial transfer of entangled states in the correlated quantum dots system. 2022 , 19, 055208	0
228	Electronic and optical properties of Janus black arsenic-phosphorus AsP quantum dots under magnetic field.. 2022 ,	0
227	Two-qubit silicon quantum processor with operation fidelity exceeding 99.. 2022 , 8, eabn5130	1
226	Quantum correlations in optomechanical system in the presence of optical feedback. 2022 , 11, 100100	0
225	Fault Localization Scheme for Missing Gate Faults in Reversible Circuits. 2022 , 27, 1-29	

224	Scaling silicon-based quantum computing using CMOS technology. 2021 , 4, 872-884	10
223	Deep reinforcement learning for universal quantum state preparation via dynamic pulse control. 2021 , 8,	2
222	Spin manipulation and decoherence in a quantum dot mediated by a synthetic spin-orbit coupling of broken T-symmetry. 2022 , 24, 013002	
221	Strong electron-electron interactions in Si/SiGe quantum dots. 2021 , 104,	2
220	Shaping the Future of the Application of Quantum Computing in Intelligent Transportation System. 2021 , 2, 259-276	1
219	Cryogen-free scanning gate microscope for the characterization of Si/Si _{0.7} Ge _{0.3} quantum devices at milli-Kelvin temperatures. 2021 , 11, 125122	0
218	The path to scalable quantum computing with silicon spin qubits. 2021 ,	2
217	Controlling the dynamics of dissipationless localized bound states in open quantum systems with periodic driving fields. <i>Physical Review A</i> , 2021 , 104,	2.6
216	Quantum computation protocol for dressed spins in a global field. 2021 , 104,	2
215	Geometric wavefront dislocations of RKKY interaction in graphene. 2021 , 104,	
214	Electron-spin-resonance meanderlines for effective spin control in Si quantum dots for large-scale qubit applications. 2021 , 119, 243503	
213	Materials for Silicon Quantum Dots and their Impact on Electron Spin Qubits. 2022 , 32, 2105488	2
212	Silicon-based Quantum Computing: High-density, High-temperature Qubits. 2021 ,	1
211	Superconducting Circuit Companion—An Introduction with Worked Examples. 2021 , 2,	0
210	Tripartite measurement uncertainty in a Heisenberg XXZ model. 2022 , 137, 1	1
209	Ab initio calculations of spin-nonconserving exciton-phonon scattering in monolayer transition metal dichalcogenides.. 2022 ,	1
208	Graph- >< , a Graph-Based Quantum/Classical Algorithm for Efficient Electronic Structure on Hybrid Quantum/Classical Hardware Systems: Improved Quantum Circuit Depth Performance.. 2022 ,	0
207	Control of Magnetocaloric Effect in Quantum Dots Using Electrical Field at Low Temperatures. 1	0

206	Properties and applications of quantum dots derived from two-dimensional materials. 2022 , 7,	
205	Optically Controlled Spin Gate Using GaN Quantum Dots.	1
204	Gate-Controlled Quantum Dots Based on 2D Materials. 2100162	2
203	Dissipation and gate timing errors in SWAP operations of qubits. 2022 , 105,	0
202	Error rate reduction of single-qubit gates via noise-aware decomposition into native gates.. 2022 , 12, 6379	0
201	Quantum Engineered Devices Based on Two-Dimensional Materials for Next-Generation Information Processing and Storage.. 2022 , e2109894	2
200	Transport Through the T-Shaped Double-Quantum-Dot Structure with Side-Coupled Majorana Bound States.	
199	Hierarchical equations of motion approach to hybrid fermionic and bosonic environments: Matrix product state formulation in twin space.	3
198	Modulation of Spin Dynamics in 2D Transition-Metal Dichalcogenide via Strain-Driven Symmetry Breaking.. 2022 , e2200816	1
197	Impact of the valley orbit coupling on exchange gate for spin qubits in silicon. 2022 , 8,	0
196	Quantum-Memory-Assisted Entropic Uncertainty Relation in the Heisenberg XXZ Spin Chain Model with External Magnetic Fields and Dzyaloshinski-Moriya Interaction. 2022 , 61,	
195	Coherent Spin-Spin Coupling Mediated by Virtual Microwave Photons. 2022 , 12,	0
194	Epitaxial growth of planar hutwires on silicon-on-insulator substrates.	
193	Emerging qubit systems: Guest editorial. 2022 , 120, 190401	
192	Quantum magnonics: When magnon spintronics meets quantum information science. 2022 , 965, 1-74	11
191	Simulation of silicon quantum dots with diamond-channel by simplified ME model. 2022 , 38, 105575	
190	Interpretation of 28 nm FD-SOI quantum dot transport data taken at 1.4 K using 3D quantum TCAD simulations. 2022 , 194, 108355	0
189	Scalable estimation of pure multi-qubit states. 2022 , 8,	0

188	Controllable spin diode based on a semiconductor quantum dot.		
187	Emergence and Dynamical Stability of a Charge Time-Crystal in a Current-Carrying Quantum Dot Simulator.. 2022 ,		0
186	Superoperator structures and no-go theorems for dissipative quantum phase transitions. <i>Physical Review A</i> , 2022 , 105,	2.6	0
185	Single-Shot Spin Readout in Graphene Quantum Dots. 2022 , 3,		0
184	Probing Mean Values and Correlations of High-Spin Systems on a Quantum Computer.		
183	A Ginzburg-Landau Approach to Field Theories for Single, Isolated Zero-Dimensional Superconductors.		
182	Twisting Enabled Charge Transfer Excitons in Epitaxially Fused Quantum Dot Molecules.		0
181	Quantum coherence protection by noise. 2022 , 19, 075202		
180	Two Spins Take the Quantum Bus. 15,		
179	A novel bioinspired quantum photocell based on GaN quantum dots. 2022 , 96,		
178	Indirect control of the ^{29}Si nuclear spin in diamond. 2022 , 105,		0
177	Local quantum uncertainty and local quantum Fisher information in two-coupled double quantum dots. 2022 , 54,		1
176	Low-Dose Sparse-View HAADF-STEM-EDX Tomography of Nanocrystals Using Unsupervised Deep Learning.		1
175	Negativity and quantum phase transition in a mixed spin-(1/2, 5/2) system. 2022 , 127753		
174	Two-qubit controlled-Z gates robust against charge noise in silicon while compensating for crosstalk using neural network. 2022 , 105,		0
173	Quantum Mechanics, Ambiguity and Design: Towards a Framework. 2022 ,		
172	Quantum teleportation between the narrow armchair graphene nanoribbons with zigzag ends. 2022 , 34, 335604		
171	Microwave-Frequency Scanning Gate Microscopy of a Si/SiGe Double Quantum Dot. 2022 , 22, 4807-4813		0

- 170 Intrinsic decoherence effects on nonclassical correlations in a symmetric spin-orbit model. **2022**, 39, 105693 ○
- 169 Tunneling Current Through a Double Quantum Dots System. **2022**, 1-1
- 168 Analysis of coupled quantum parametric harmonic oscillators by classical nonlinear modeling. **2022**, 13, 570-581
- 167 İlk Paralel Spin Zincirinde Dolabilir Sinerji Dipol-dipol Etkisi: Monte Carlo Simülasyonu.
- 166 Load Effects on Quantum Dots Antennas Connected with Nanowires. **2022**,
- 165 Characterizing quantum nonlocalities under the Heisenberg XYZ spin model with Dzyaloshinskii-Moriya interaction. **2022**, 19, 085203
- 164 From Quantum Materials to Microsystems. **2022**, 15, 4478
- 163 Coupling Perovskite Quantum Dot Pairs in Solution using a Nanoplasmonic Assembly. **2022**, 22, 5287-5293
- 162 Spin relaxation in a single-electron graphene quantum dot. **2022**, 13, ○
- 161 DFT Analysis of Hole Qubits Spin State in Germanium Thin Layer. **2022**, 12, 2244
- 160 Electrocaloric effect in quantum dots using the non-extensive formalism. **2022**, 54,
- 159 Quantum Computing An Emerging Computing Paradigm. **2023**, 145-167
- 158 Quantum algorithm for Gaussian process regression. *Physical Review A*, **2022**, 106, 2.6
- 157 The effect of intrinsic decoherence on quantum dynamics of two coupled double quantum dot systems. **2022**, 414175
- 156 Electronic control and switching of entangled spin state using anisotropy and exchange in the three-particle paradigm. **2022**, 6, 075007 ○
- 155 Unitary Design of Quantum Spin Networks for Robust Routing, Entanglement Generation, and Phase Sensing. 2200013
- 154 Transport through the T-shaped double-quantum-dot structure with side-coupled Majorana bound states. **2022**, 143, 115397
- 153 Energy levels and nonlinear optical properties of spheroid-shaped CdTe/ZnTe core/shell quantum dot. **2022**, 155, 108425 ○

- 152 Cryogenic Electronics and Quantum Information Processing. **2021**,
- 151 Proposal for a cavity-induced measurement of the exchange coupling in quantum dots. **2022**, 4, 0
- 150 Estimation of Convex Polytopes for Automatic Discovery of Charge State Transitions in Quantum Dot Arrays. **2022**, 11, 2327 2
- 149 Continuous variable quantum discord in a cavity electrooptical down-conversion quantum system. **2022**,
- 148 Swap Test with Quantum Dot Charge Qubits. **2022**, 18,
- 147 Near-optimal circuit mapping with reduced search paths on IBM quantum architectures. **2022**, 104637 0
- 146 Rashba effect on linear and nonlinear optical properties of a cylindrical core/shell heterojunction quantum dot. 10, 0
- 145 SPIN AND EXCHANGE IN MIXED QUANTUM STATES FROM FIRST PRINCIPLES IN FEYNMAN PATH INTEGRAL QUANTUM STATISTICAL MECHANICS REPRESENTATION. **2022**,
- 144 Sub- to super-Poissonian crossover of current noise in helical edge states coupled to a spin impurity in a magnetic field. **2022**, 106,
- 143 Electrical manipulation of a hole spin qubit in nanowire quantum dot: the nontrivial magnetic field effects. 0
- 142 High-fidelity universal quantum gates for hybrid systems via the practical photon scattering.
- 141 An automated approach for consecutive tuning of quantum dot arrays. **2022**, 121, 084002
- 140 Surface evolution of crystalline SrTiO₃, LaAlO₃ and Y₃Al₅O₁₂ targets during pulsed laser ablation. **2022**, 128, 1
- 139 Fully Tunable Longitudinal Spin-Photon Interactions in Si and Ge Quantum Dots. **2022**, 129, 0
- 138 Spiderweb Array: A Sparse Spin-Qubit Array. **2022**, 18, 1
- 137 Quantum Tomography of Entangled Spin-Multiphoton States. **2022**, 18,
- 136 About Electron Transport and Spin Control in Semiconductor Devices. **2022**, 108443
- 135 Ultrafast electron dynamics of graphene quantum dots: High harmonic generation. **2022**, 106, 0

- 134 Parametric longitudinal coupling between a high-impedance superconducting resonator and a semiconductor quantum dot singlet-triplet spin qubit. **2022**, 13, 0
- 133 Self-generated Floquet modulation in a multiharmonic-dressed alignment-based magnetic-resonance system. **2022**, 106, 0
- 132 Effective hopping between magnetic impurities in silicene. **2022**, 562, 169726
- 131 Efficient Gating of Magnons by Proximity Superconductors. **2022**, 129, 0
- 130 Impurity effect on thermal properties of tuned quantum dot/ring systems. **2022**, 806, 140000 0
- 129 Decoherence and maintenance of an entangled state in three-spin system coupled to ferromagnetic electrodes. **2022**, 646, 414297 0
- 128 Quantum-Dot Spin Chains. **2022**, 505-538 0
- 127 Charge detection of a quantum dot under different tunneling barrier symmetries and bias voltages. **2022**, 14, 14029-14037 0
- 126 A review on quantum information processing in cavities. **2022**, 137, 0
- 125 Long-range entanglement in quantum dots with Fermi-Hubbard physics. **2022**, 106, 0
- 124 Pauli spin blockade in a resonant triple quantum dot molecule. **2022**, 132, 064402 0
- 123 Anomalous Electromagnetic Tunneling in Bianisotropic ϵ -Zero Media. **2022**, 129, 0
- 122 Anomalous Zero-Field Splitting for Hole Spin Qubits in Si and Ge Quantum Dots. **2022**, 129, 0
- 121 Scheme for implementing nonlocal high-fidelity quantum controlled-not gates on quantum-dot-confined electron spins using optical microcavities and photonic hyperentanglement. 10, 1
- 120 All-optical control of pendular qubit states with nonresonant two-color laser pulses. **2022**, 5, 0
- 119 Assembly, Properties, and Application of Ordered Group III-V and IV-VI Colloidal Semiconductor Nanoparticle Films. **2022**, 9, 2201039 0
- 118 Spin textures and Berry phases for holes confined in SiGe mixed-alloy two-dimensional quantum well system—quantization of Berry phase via intersubband interaction— 0
- 117 A single hole spin with enhanced coherence in natural silicon. 3

- 116 Coupled superconducting spin qubits with spin-orbit interaction. **2022**, 106, 0
- 115 Dynamics of two central spins immersed in spin baths. **2022**, 106, 1
- 114 Preparation of the Hadamard and CNOT Gates to Realize The Maximum Entangled States. **2022**, 0
- 113 Effects of laser-annealing on fixed-frequency superconducting qubits. **2022**, 121, 142601 0
- 112 Atomistic Tight-Binding Study of Core/Shell Nanocrystals. **2022**, 641-667 0
- 111 Multi-Gate FD-SOI Single Electron Transistor for hybrid SET-MOSFET quantum computing. **2022**, 0
- 110 Entanglement between quantum dots electronic spins and circular polarized cavity photons due to the spin-orbit interaction. **2022**, 115553 0
- 109 Spin and Orbital Spectroscopy in the Absence of Coulomb Blockade in Lead Telluride Nanowire Quantum Dots. **2022**, 13, 0
- 108 Ultrafast valley polarization of graphene nanorings. **2022**, 106, 0
- 107 Circuit-QED based time-averaged dispersive readout of a semiconductor charge qubit. **2022**, 121, 184004 0
- 106 Microscopic Origin of the Effective Spin-Spin Interaction in a Semiconductor Quantum Dot Ensemble. **2022**, 129, 0
- 105 The Use of Exchange Coupled Atom Qubits as Atomic-Scale Magnetic Field Sensors. 2201625 0
- 104 Spin quantum transport in double top-gate system. **2022**, 0
- 103 Electrically driven spin resonance with bichromatic driving. **2022**, 106, 0
- 102 PEI N-doped graphene quantum dots/p-type silicon Schottky diode. **2022**, 36, 100436 1
- 101 Nonunitary gate operations by dissipation engineering. **2023**, 8, 015001 0
- 100 Correlated nanoelectronics and the second quantum revolution. **2022**, 10, 110901 0
- 99 Design and Modelling of Silicon Quantum Dot Based Single Qubit Spin Quantum Gates. **2022**, 61, 1

- 98 Correlations dynamics of two-spin XYZ Heisenberg model via negativity and skew information. ○
- 97 Design and integration of single-qubit rotations and two-qubit gates in silicon above one Kelvin. **2022**, 3, ○
- 96 A Ginzburg-Landau approach to field theories for single, isolated zero-dimensional superconductors. **2022**, 454, 128502 ○
- 95 Influence of errors on the transport of quantum information through distant quantum dot spin qubits. **2022**, 454, 128499 ○
- 94 Charge stability diagram of serial triple quantum dots. **2023**, 0 ○
- 93 Electronic structure and terahertz intersubband absorption spectra of phosphorus donor in silicon using a variationally optimized diagonalization method. **2023**, 146, 115535 ○
- 92 Effect of ac magnetic field on single qubit gate operation in noisy environment. **2022**, ○
- 91 Chiral, magnetic, molecule-based materials: A chemical path toward spintronics and quantum nanodevices. **2022**, 132, 180901 ○
- 90 Electrical two-qubit gates within a pair of clock-qubit magnetic molecules. **2022**, 8, 1
- 89 Qubits based on merons in magnetic nanodisks. **2022**, 3, ○
- 88 Decoherence of a spin-valley qubit in a MoS_2 quantum dot. ○
- 87 Optimisation of electron spin qubits in electrically driven multi-donor quantum dots. **2022**, 8, ○
- 86 Nanoelectronic Systems for Quantum Computing. **2023**, 1201-1230 ○
- 85 Spin-Based Devices for Digital Applications. **2023**, 1123-1166 ○
- 84 Robust electron spin qubit control in a nanowire double quantum dot. **2022**, 380, ○
- 83 Non-adiabatic quantum control of quantum dot arrays with fixed exchange using Cartan decomposition. **2022**, 380, ○
- 82 2023 roadmap for materials for quantum technologies. 1
- 81 Spin-Electric Coupling, Magnetoelectricity, and Quantum Dynamics of Toroidal Moment in Lanthanide-Based Single Molecule Toroids. **2022**, 133-187 ○

80	A generalizable TCAD framework for silicon FinFET spin qubit devices with electrical control. 2023 , 200, 108550	0
79	Quantum Control of Hole Spin Qubits in Double Quantum Dots. 2022 , 18,	0
78	Bell-state generation for spin qubits via dissipative coupling. 2022 , 106,	1
77	Magnetolectric Cavity Magnonics in Skyrmion Crystals. 2022 , 3,	0
76	Quantum Computing with Majorana Kramers Pairs. 2022 , 129,	0
75	Probing details of spin-orbit coupling through Pauli spin blockade. 2022 , 106,	0
74	Universal quantum computation with symmetric qubit clusters coupled to an environment. 2022 , 106,	0
73	Tunable Superconducting Coupling of Quantum Dots via Andreev Bound States in Semiconductor-Superconductor Nanowires. 2022 , 129,	0
72	Scalable fabrication of graphene nanoribbon quantum dot devices with stable orbital-level spacing. 2022 , 3,	0
71	Room-temperature coherent optical manipulation of hole spins in solution-grown perovskite quantum dots.	0
70	State initialization of a hot spin qubit in a double quantum dot by measurement-based quantum feedback control. 2022 , 106,	0
69	Charge-Noise-Induced Dephasing in Silicon Hole-Spin Qubits. 2022 , 129,	0
68	Single-electron pump in a quantum dot array for silicon quantum computers.	0
67	Atomic fluctuations lifting the energy degeneracy in Si/SiGe quantum dots. 2022 , 13,	1
66	Micromagnet design for addressable fast spin manipulations in a 2D quantum dot array. 2022 , 132, 224301	1
65	Transport in deformed centrosymmetric networks. 2022 , 106,	0
64	Random spin-orbit gates in the system of a topological insulator and a quantum dot. 2022 , 106,	0
63	Variational quantum eigensolver for the Heisenberg antiferromagnet on the kagome lattice. 2022 , 106,	0

62	High-Fidelity State Preparation, Quantum Control, and Readout of an Isotopically Enriched Silicon Spin Qubit. 2022 , 18,	2
61	Long-distance coupling of spin qubits via topological magnons. 2022 , 106,	0
60	Modular Approach to Creating Functionalized Surface Arrays of Molecular Qubits. 2208998	1
59	The Synthetic Hilbert Space of Laser-Driven Free-Electrons. 7, 888	0
58	Quanten-Computing. 2022 , 55-120	0
57	Theory on Electron-Phonon Spin Dephasing in GaAs Multi-Electron Double Quantum Dots. 2200074	0
56	Effective Landé factors of electrons and holes in lead chalcogenide nanocrystals. 2023 , 107,	0
55	Quantum Fisher information versus quantum skew information in double quantum dots with Rashba interaction. 2023 , 129,	0
54	Energy dynamics, heat production and heat-work conversion with qubits: towards the development of quantum machines.	0
53	Effect of the number of quantum dots on transport properties of multiple quantum dot systems in T-shaped topology. 2023 , 97,	0
52	Optimal Control of a Cavity-Mediated iSWAP Gate between Silicon Spin Qubits. 2022 , 18,	0
51	Colloidal Quantum Dots: Synthesis, Composition, Structure, and Emerging Optoelectronic Applications. 2200551	1
50	Spatially Resolving Electron Spin Resonance of a Radical in Single-molecule Magnet. 2023 , 23, 213-219	0
49	Spin-orbit enhancement in Si/SiGe heterostructures with oscillating Ge concentration. 2023 , 107,	0
48	Spin dynamics in quantum dots on liquid helium. 2023 , 107,	0
47	Quantum dots: a brief review. 2023 , 41-66	0
46	Coupling and readout of semiconductor quantum dots with a superconducting microwave resonator. 2023 , 66,	0
45	Quantum entanglement between a hole spin confined to a semiconductor quantum dot and a photon. 2023 , 138,	0

- 44 Random-telegraph noise mitigation and qubit decoherence in solid-state experiments. **2023**, 2431, 012102 ○
- 43 Intramolecular Charge Transfer and Ultrafast Nonradiative Decay in DNA-Tethered Asymmetric Nitro- and Dimethylamino-Substituted Squaraines. **2023**, 127, 1141-1157 ○
- 42 Strain-induced ordered Ge(Si) hut wires on patterned Si (001) substrates. ○
- 41 Colloquium : Advances in automation of quantum dot devices control. **2023**, 95, 1 ○
- 40 Automated Reconstruction of Bound States in Bilayer Graphene Quantum Dots. **2023**, 19, ○
- 39 Device structure and fabrication process for silicon spin qubit realizing process-variation-robust SWAP gate operation. **2023**, 62, SC1088 ○
- 38 Four-terminal quantum dot as an efficient rectifier of heat and charge currents. **2023**, 107, ○
- 37 The influence of off-centre donor impurity on the tuning of the quantum ring magnetic susceptibility. **2023**, 6, 100194 ○
- 36 Understanding conditions for the single electron regime in 28 nm FD-SOI quantum dots: Interpretation of experimental data with 3D quantum TCAD simulations. **2023**, 204, 108626 ○
- 35 SPICE compact model of controlling electrons of spin qubits using FinFET. **2023**, 62, SC1065 ○
- 34 Spin Qubits in Silicon FinFET Devices. **2022**, ○
- 33 Recent advances in hole-spin qubits. **2023**, 3, 012003 ○
- 32 Interference effects in coupled triple quantum dot systems. **2023**, ○
- 31 Deterministic generation of indistinguishable photons in a cluster state. **2023**, 17, 324-329 ○
- 30 Universal quantum computer based on carbon nanotube rotators. **2023**, 62, SG0806 ○
- 29 Charge States, Triple Points, and Quadruple Points in an InAs Nanowire Triple Quantum Dot Revealed by an Integrated Charge Sensor. 2200158 ○
- 28 Faster Blockade and Excitation Transfer Behaviors of Two-Photon Rabi Oscillations of Exciton-Biexciton Levels in Coupled Quantum Dots. **2023**, 2023, 1-8 ○
- 27 Latched readout for the quantum dot hybrid qubit. **2023**, 122, 074001 ○

- 26 Nanoparticles. **2023**, 15-41 ○
- 25 Simultaneous effects of pressure, temperature, and external magnetic field on absorption threshold frequency of tuned quantum dot/ring systems: an analytical study. **2023**, 22, 641-647 ○
- 24 Two schemes for generating four-photon cluster states based on quantum dot microcavity coupling systems. **2023**, 22, ○
- 23 Resonances and antiresonances in heat generation by spin current in a quantum dot. **2023**, 35, 185302 ○
- 22 Qubit-environment entanglement outside of pure decoherence: Hyperfine interaction. **2023**, 107, ○
- 21 Gate reflectometry in dense quantum dot arrays. **2023**, 25, 033023 ○
- 20 Efectos del bombeo incoherente de excitones en la susceptibilidad óptica lineal de una nanoestructura esférica. **2022**, 13, 25-30 ○
- 19 Universal Quantum Computation Based on Nanoscale Skyrmion Helicity Qubits in Frustrated Magnets. **2023**, 130, ○
- 18 Noisy intermediate-scale quantum computers. **2023**, 18, ○
- 17 Chirping toward a Quantum RAM. 15, ○
- 16 Electron charge sensor with hole current operating at cryogenic temperature. **2023**, 16, 036504 ○
- 15 Entanglement of the Ising-Heisenberg diamond spin-1/2 cluster in evolution. **2023**, 56, 165302 ○
- 14 Modeling of spin decoherence in a Si hole qubit perturbed by a single charge fluctuator. **2023**, 107, ○
- 13 Material-Inherent Noise Sources in Quantum Information Architecture. **2023**, 16, 2561 ○
- 12 Truncated Wigner approximation for the bosonic model of large spin baths. **2023**, 107, ○
- 11 Realizable time crystal of four silicon quantum dot qubits. **2023**, 107, ○
- 10 Fundamental Study of MgB₂ Superconducting Coil for Storage Devices. 457-461 ○
- 9 Global Quantum Discord and Entanglement in two Coupled Double Quantum Dots AlGaAs/GaAs. **2023**, 62, ○

- 8 Probing the Jaynes-Cummings Ladder with Spin Circuit Quantum Electrodynamics. **2023**, 130,
- 7 Probing two-qubit capacitive interactions beyond bilinear regime using dual Hamiltonian parameter estimations. **2023**, 9,
- 6 Acceptor-based qubit in silicon with tunable strain. **2023**, 107,
- 5 Scattering solution of an interacting Hamiltonian for the electronic control of molecular spin qubits. **2023**, 107,
- 4 A systematic and bibliometric review of the latest techniques in quantum-dot computers. **2023**, 170893
- 3 Isotopically Enriched Layers for Quantum Computers Formed by ^{28}Si Implantation and Layer Exchange.
- 2 Quantum computing: MetalSilicon at low temperature via plasma oscillation. **2023**, 397-437
- 1 Ultrafast and Electrically Tunable Rabi Frequency in a Germanium Hut Wire Hole Spin Qubit. **2023**, 23, 3810-3817